PREFACE

This supplement contains amendments to the environmental regulations adopted during the 2nd quarter of 2004 (April - June).

The amendments in this publication include the following:

Media	Rule Log #	Final Date
Office of the Secretary	(OS050)	April 20, 2004
	(OS053*)	April 20, 2004
Air	(AQ234)	April 20, 2004
	(AQ235)	April 20, 2004
	(AQ236)	April 20, 2004
	(AQ239)	June 20, 2004
	(AQ241*)	May 20, 2004
Radiation Protection	(RP034*)	June 20, 2004
	(RP036)	June 20, 2004

* Fast-Track Rule – Federal regulations promulgated in accordance with expedited procedures in R.S. 49:953(F)(3)

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Title 33
ENVIRONMENTAL QUALITY
Part I. Office of the Secretary

Subpart 1. Departmental Administrative Procedures

Subpart 2. Notification

Part III. Air

Part V. Hazardous Waste and Hazardous Materials

Subpart 1. Department of Environmental Quality—Hazardous Waste

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Part XV. Radiation Protection

Title 33
ENVIRONMENTAL QUALITY
Part I. Office of the Secretary
Subpart 1. Departmental Administrative Procedures
Chapter 5. Confidential Information Regulations

§501. Scope

A. Department of Environmental Quality information and records obtained under the Louisiana Environmental Quality Act, or by any rule, regulation, order, license, registration, or permit term or condition adopted or issued thereunder, or by any investigation authorized thereby, shall be available to the public, unless confidentiality is requested in writing and the information or records are determined by the department to require confidentiality.

B. Unless otherwise provided by law or regulation, information or records may be classified as confidential if the secretary makes a written determination that confidentiality is necessary to:

1. prevent impairment of an ongoing investigation;

2. prevent prejudice to the final decision regarding a violation;

3. protect trade secrets;

4. protect proprietary secrets;

5. protect commercial or financial information; or

6. comply with federal or state law or regulation or a valid court order.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:342 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2439 (November 2000), LR 30:742 (April 2004).

§502. Definitions

Administrative Authority—repealed.

Air Emission Data—any information necessary or used to determine or calculate the identity, amount, frequency, concentration, or other characteristic of any emission or discharge that has been emitted or discharged by a source; or any information necessary or used to determine or calculate the identity, amount, frequency, concentration, or other characteristic of an emission that, under an applicable standard or limitation, a source was authorized to emit or discharge including, to the extent necessary to identify the source and to distinguish it from other sources, a description of the device, installation, or operation constituting the source. This includes the calculation of an "allowable" emission limit for a permit.

Complete—in reference to a request for confidentiality of information or records, the request contains everything necessary for a determination to be made. Designating a request complete does not preclude the department from requesting or accepting an amended request.

Financial Request—a single character request that contains financial information or records only. This includes, but is not limited to, financial accounts statements, gross revenues statements, profit and loss statements, projected revenues statements, tax returns, financial/accounting statements, and financial audit documentation/reports.

Mixed Character Record—a record submitted as part of a request for confidentiality that, in addition to information that meets the criteria for confidentiality specified by law, also contains information that either does not meet the criteria for confidentiality specified by law or is prohibited by law or regulation from being classified as confidential.

Mixed Character Request—a request for confidentiality that contains one or more mixed character records.

Single Character Request—a request for confidentiality that contains only information or records that meet the criteria for confidentiality specified by law.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:2439 (November 2000), amended LR 30:742 (April 2004).

§503. Requests for Confidentiality

A. Each request for confidentiality shall include all of the following:

1. a statement whether the request for confidentiality is a single character request, a mixed character request, or a financial request;

2. a list or an index identifying each separate record, category of records, or item of information and stating the legal authority under which each separate record or item of information may be determined to require confidentiality;

3. a statement of the measures taken to guard against undesired disclosure to others of each record or item of information;

4. a statement of the extent to which the information or records have been disclosed to others and the precautions taken in connection therewith;

5. a statement whether disclosure of the information or records would be likely to result in substantial harmful effects in the competitive market and, if so:

a. a statement of what those effects would be;

b. a statement of why they should be viewed as substantial; and

c. an explanation of the causal relationship between disclosure and such harmful effects for each record or item of information;

6. a statement whether any previous request for confidentiality has been made to any government agency for the same information or records and, if so, the date of the request and its disposition; and

7. a certification that all statements are true and correct to the best of the requester's knowledge.

B. Each request shall be submitted with two versions of the information or records; one version to be clearly marked "confidential," and the other to be clearly marked "public."

1. The confidential version is to show all information and must clearly indicate what confidential information is excised from the public version.

2. The public version is to have the confidential information excised and must clearly show that confidential information has been excised.

3. Blacking out confidential portions of otherwise public records is permissible, provided that the blacked-out portions are clearly identified in both confidential and public versions.

C. A financial request is not required to comply with the provisions of Paragraphs A.2-5 of this Section.

D. A single character request shall include a certification that no record or item of information is contained in the request that:

1. fails to meet the criteria for confidentiality specified by law; or

2. is prohibited by law or regulation from being classified as confidential.

E. Specific categories of information that are prohibited from being classified as confidential include:

1. air emission data;

2. any permit or portion of a permit issued to a source in accordance with LAC 33:III.507;

3. effluent and discharge data to surface water and groundwater;

4. the location and identification of any buried waste;

5. the name and address of any license, registration, or permit applicant or permittee;

6. all NPDES, LPDES, and other water discharge permit applications or permits and information required by LPDES application forms, including information submitted on the forms and any attachments used to supply information required by the forms;

7. any other information required by law or regulation to be disclosed or made available to the public; and

8. any other information for which a claim of confidentiality is prohibited by law or regulation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:342 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:743 (April 2004).

§505. Responses to Requests for Confidentiality

A. The department shall make a determination and send a written response to the requester by certified mail within a reasonable time from receipt of a complete request for confidentiality, except for those requests made in accordance with R.S. 30:2074(D), in which case the department shall send a written response by certified mail within 21 working days from receipt of a complete request for confidentiality.

B. The department's determination shall become final unless, no later than 30 days after receipt of the written determination, the requester files a written request for a hearing.

C. Information or records for which a complete confidentiality request has been submitted shall be held confidential until the department's determination becomes final. Departmental employees, other than those charged with assessing the request for confidentiality, shall not be given access to such information or records, even if necessary for the performance of their jobs, until the department's determination as to confidentiality becomes final.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:342 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:743 (April 2004).

§507. Accessibility

A. If a request for confidentiality is granted, such confidentiality shall not prevent the necessary use of the information or records by department employees or duly authorized officers or employees of local, state, or federal governments in carrying out their responsibilities under law. The secretary or the secretary's designee must duly authorize any officer or employee of local, state, or federal government who seeks access to confidential information or records.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030 and 30:2074.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:343 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:744 (April 2004).

§508. Maintenance of Confidential Information

Repealed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:343 (May 1996), repealed by the Office of Environmental Assessment, Environmental Planning Division, LR 30:744 (April 2004).

§509. Release of Confidential Information or Records

A. Information or records that are declared confidential to prevent impairment of an ongoing investigation or prejudice to the final decision regarding a violation will be made available for public inspection upon conclusion of the investigation or rendition of the final decision regarding a violation.

B. All other information or records that are declared confidential are subject to public disclosure three years from the date of determination of confidentiality, unless a complete request for continuance of confidentiality is received no later than 180 days prior to the expiration of the three-year period.

C. The submitter of information or records or the submitter's successor or assignee shall notify the secretary, by authentic act, of any information or record that is no longer considered to be confidential and shall release the secretary from any responsibility with regard to any claim of confidentiality concerning that record or information.

D. Renewal of a grant of confidentiality is at the discretion of the secretary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 22:343 (May 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:744 (April 2004).

§511. Disclosure of Confidential Records or Information

A. Any employee or former employee of the department or anyone acting as a representative of the secretary of the department who is convicted of intentional disclosure or conspiracy to disclose trade secrets or other information that has been determined to be confidential is guilty of a misdemeanor and, upon conviction, shall be punished by a fine of not more than $1,000, imprisonment for up to one year, or both.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2030.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:744 (April 2004).

Subpart 2. Notification

Chapter 39. Notification Regulations and Procedures for Unauthorized Discharges

Subchapter E. Reportable Quantities for Notification of Unauthorized Discharges

§3931. Reportable Quantity List for Pollutants

A. Incorporation by Reference of Federal Regulations. Except as provided in Subsection B of this Section, the following federal reportable quantity lists are incorporated by reference:

1. 40 CFR 117.3, July 1, 2003, Table 117.3—Reportable Quantities of Hazardous Substances Designated Pursuant to Section 311 of the Clean Water Act; and

2. 40 CFR 302.4, July 1, 2003:

A.2.a. – B.Note @. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2025(J), 2060(H), 2076(D), 2183(I), 2194(C), 2204(A), and 2373(B).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, LR 11:770 (August 1985), amended LR 19:1022 (August 1993), LR 20:183 (February 1994), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:944 (September 1995), LR 22:341 (May 1996), amended by the Office of the Secretary, LR 24:1288 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 29:698 (May 2003), LR 30:751 (April 2004).

Title 33

ENVIRONMENTAL QUALITY

Part III. Air

Chapter 5. Permit Procedures

§504. Nonattainment New Source Review Procedures

A. – A.5. …

6. For applications deemed administratively complete in accordance with LAC 33:III.519.A on or after December 20, 2001 and prior to June 23, 2003, the provisions of this Section governing serious ozone nonattainment areas shall apply to VOC and NO_x increases. For applications deemed administratively complete in accordance with LAC 33:III.519.A on or after June 23, 2003, the provisions of this Section governing severe ozone nonattainment areas shall apply to VOC and NO_x increases.

B. – D.2. …

3. Notwithstanding Paragraph D.2 of this Section, in the case of any major stationary source located in an area classified as serious or severe, if the owner or operator of the source elects to offset the emissions increase by a reduction in emissions of VOC or NO_x, as specified in Paragraph F.1 of this Section, from other operations, units, or activities within the source at an internal offset ratio of at least 1.40 to 1 (if reviewed under requirements for serious areas) or 1.50 to 1 (if reviewed under requirements for severe areas), then the requirements for LAER shall not apply.

D.4. – Table 1."PM_{10}". …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:176 (February 1993), repromulgated LR 19:486 (April 1993), amended LR 19:1420 (November 1993), LR 21:1332 (December 1995), LR 23:197 (February 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2445 (November 2000), LR 27:2225 (December 2001), LR 30:752 (April 2004).

§507. Part 70 Operating Permits Program

A. – B.1. …

2. No Part 70 source may operate after the time that the owner or operator of such source is required to submit a permit application under Subsection C of this Section, unless an application has been submitted by the submittal deadline and such application provides information addressing all applicable sections of the application form and has been certified as complete in accordance with LAC 33:III.517.B.1. No Part 70 source may operate after the deadline provided for supplying additional information requested by the permitting authority under LAC 33:III.519, unless such additional information has been submitted within the time specified by the permitting authority. Permits issued to the Part 70 source under this Section shall include the elements required by 40 CFR 70.6. The department hereby adopts and incorporates by reference the provisions of 40 CFR 70.6(a), July 1, 2003. Upon issuance of the permit, the Part 70 source shall be operated in compliance with all terms and conditions of the permit. Noncompliance with any federally applicable term or condition of the permit shall constitute a violation of the Clean Air Act and shall be grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.

C. – J.5. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2011, 2023, 2024 and 2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 19:1420 (November 1993), LR 20:1375 (December 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2447 (November 2000), LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 29:698 (May 2003), LR 30:1008 (May 2004).

Chapter 14. Conformity

Subchapter B. Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded, or Approved Under Title 23 U.S.C. or the Federal Transit Act

§1432. Incorporation by Reference

A. 40 CFR Part 93, Subpart A, July 1, 2003, is hereby incorporated by reference with the exclusion of Section 105.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 24:1280 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 29:697 (May 2003), LR 30:1009 (May 2004).

Chapter 21. Control of Emission of Organic Compounds

Subchapter A. General

§2104. Crude Oil and Condensate

A. Applicability. This Section applies to any oil and gas production facility (SIC Code 1311), natural gas processing plant (SIC Code 1321), or natural gas transmission facility (SIC Code 4922) that has a potential to emit 25 Tons Per Year (TPY) or more of flash gas to the atmosphere in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of flash

gas to the atmosphere in the parish of Calcasieu; or 100 TPY or more of flash gas to the atmosphere in any other parish.

B. – C.1. …

2. For facilities in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 25 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

3. For facilities in the parish of Calcasieu with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 50 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

4. For facilities in parishes other than Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, and West Baton Rouge with a potential to emit less than 250 tons per year of flash gas, aggregated facility flash gas emissions shall be reduced by a minimum of 95 percent or reduced to a potential to emit of less than 100 TPY by means of a federally enforceable permit revision that permanently restricts production, hours of operation, and/or capacity utilization or other equivalent control and requires the maintenance of records to demonstrate compliance with the permit restrictions.

D. – D.3. …

E. Compliance Schedule. For equipment located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, compliance shall be achieved as soon as practicable, but no later than September 1, 1998. For equipment located in the parish of Calcasieu with a potential to emit less than 100 TPY, compliance shall be achieved as soon as practicable, but no later than August 20, 2003. For all other facilities compliance shall be achieved as soon as practicable, but no later than May 1, 1999. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

F. – G.5. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:1497 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1764 (August 2002), LR 30:745 (April 2004).

§2108. Marine Vapor Recovery

A. Applicability. An affected facility is any marine loading operation serving ships and/or barges loading crude oil, gasoline, or volatile organic compounds (VOC) with an uncontrolled emission of 25 tons per year (TPY) or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 100 TPY or greater of VOC in any other parish. Emissions from VOC with a true vapor pressure of less than 1.5 psia at the loading temperature of the liquid are exempt from the control requirements of this Section.

B. – D.3. …

4. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

E. – H.2. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 14:704 (October 1988), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:959 (November 1990), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:20 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2452 (November 2000), LR 30:745 (April 2004).

§2115. Waste Gas Disposal

Any waste gas stream containing volatile organic compounds (VOC) from any emission source shall be controlled by one or more of the applicable methods set forth in Subsections A-G of this Section. This Section shall apply to all waste gas streams located at facilities that have the potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or 100 TPY or more of VOC in any other parish. This Section does not apply to waste gas streams that must comply with a control requirement, meet an exemption, or are below an applicability threshold specified in another section of this Chapter. This Section does not apply to waste gas streams that are required by another federal or state regulation to implement controls that reduce VOC to a more stringent standard than would be required by this Section.

A. – H.1. …

a. it can be demonstrated that the waste gas stream is not a part of a facility that emits, or has the potential to emit, 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or 100 TPY or more of VOC in any other parish;

H.1.b. – I.5. …

J. Compliance. All facilities affected by this Section shall be in compliance as soon as practicable but in no event later than August 20, 2003. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

J.1. – M.*Waste Gas Stream*. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:960 (November 1990), LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 19:317 (March 1993), LR 22:1212 (December 1996), LR 24:21 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1764 (August 2002), LR 30:745 (April 2004).

Subchapter B. Organic Solvents

§2123. Organic Solvents

A. – D.7. …

a. the affected portion of the facility will not emit 25 tons per year (TPY) or more of VOC if the facility is located in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge, or 50 TPY or more of VOC if located in any other parish;

D.7.b. – G.*Repair and Maintenance Thermoplastic Coating*. …

H. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended LR 16:119 (February 1990), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:654 (July 1991), LR 18:1122 (October 1992), LR 22:340 (May 1996), LR 22:1212 (December 1996), LR 23:1678 (December 1997), LR 24:23 (January 1998), LR 24:1285 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1240 (July 1999), LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:746 (April 2004).

Subchapter C. Vapor Degreasers

§2125. Vapor Degreasers

A. – C.2.j. …

D. Exemptions. Except as required in this Subsection, a vapor degreaser emitting 100 pounds (45 kilograms) or less of volatile organic compounds (VOC) in any consecutive 24-hour period (uncontrolled) is exempt from the provisions of this Section provided the total emissions from all the vapor degreasers at the facility combined are less than 100 tons per year of VOC, uncontrolled. If these two conditions are not met, the provisions of this Section must apply. For the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, the requirements of this Section apply to all solvent metal cleaners, except as follows.

D.1. – G. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:962 (November 1990), LR 18:1122 (October 1992), LR 22:1212 (December 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 28:1765 (August 2002), LR 30:746 (April 2004).

Subchapter H. Graphic Arts

§2143. Graphic Arts (Printing) by Rotogravure and Flexographic Processes

A. Control Requirements. No person shall operate or allow the operation of a packaging rotogravure, publication rotogravure, or flexographic printing facility having a potential to emit 25 TPY or more of VOC in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; having a potential to emit 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee; or having a potential to emit 100 TPY or more of VOC in any other parish, unless VOC emissions are controlled by one of the methods in Paragraphs A.1-5 of this Section. Once a facility is subject to the provisions of this Section, it remains so regardless of future variations in production.

1. – 5. …

B. Applicability Exemption. A rotogravure or flexographic printing facility that has the potential to emit, at full production (8760 hours per year basis), a combined weight of VOC of less than 25 TPY in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge; less than 50 TPY in the parishes of Calcasieu and Pointe Coupee; or less than 100 TPY in any other parish, calculated from historical records of actual consumption of ink, is exempt from the provisions of Subsections A and C of this Section and need only comply with Subsection D of this Section.

C. – D.3. …

E. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Air Quality Division, LR 13:741 (December 1987), amended by the Office of Air Quality and Radiation Protection, Air Quality Division, LR 16:964 (November 1990), LR 18:1123 (October 1992), LR 22:1212 (December 1996), LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1796 (October 1999), LR 28:1765 (August 2002), LR 30:746 (April 2004).

Subchapter J. Limiting Volatile Organic Compound (VOC) Emissions from Reactor Processes and Distillation Operations in the Synthetic Organic Chemical Manufacturing Industry (SOCMI)

§2147. Limiting VOC Emissions from SOCMI Reactor Processes and Distillation Operations

A. Applicability

1. The provisions of this Subchapter apply to any vent stream discharging to the atmosphere and originating from a process unit in which a reactor process or distillation operation is located. This Subchapter shall apply to all vents located at facilities that emit, or have the potential to emit, 25 tons per year (TPY) or more of volatile organic compounds (VOC), plantwide, in the affected parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee. Once an operation is considered to be covered by this Subchapter, it shall be so considered ad infinitum. A decision tree is provided (Figure 1) to facilitate determination of applicability to this Subchapter on a per vent basis. The total resource effectiveness (TRE) index value may be applied on an individual process vent stream basis for a given process unit. Compliance with this rule shall be attained within a period of two years after promulgation. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision. Any emission source that is subject to this rule and to the Waste Gas Disposal Rule (LAC 33:III.2115) shall comply with this rule only. This rule shall apply only to Standard Industrial Major Code 28.

A.2. – Figure 1. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:380 (April 1995), amended LR 22:1212 (December 1996), LR 23:1508 (November 1997), LR 23:1510 (November 1997), LR 23:1679 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:747 (April 2004).

Subchapter K. Limiting Volatile Organic Compound (VOC) Emissions from Batch Processing

§2149. Limiting VOC Emissions from Batch Processing

A. Applicability

1. The provisions of this Subchapter apply to process vents associated with batch processing operations. This Subchapter shall apply to the stationary sources that emit, or have the potential to emit, 25 tons per year (TPY) or more of VOC in the affected parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge, or 50 TPY or more of VOC in the parishes of Calcasieu and Pointe Coupee. Once an operation is considered to be covered by this Subchapter, it shall be so considered ad infinitum. The scope of affected industries is limited to those industries in the following standard industrial classification (SIC) codes: 2821, 2833, 2834, 2861, 2865, 2869, 2879. Compliance with this rule shall be attained within a period of two years after promulgation. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision. Any emission source that is subject to this rule and to the Waste Gas Disposal Rule (LAC 33:III.2115) shall comply with this rule only.

A.2. – G.2.c.v. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:387 (April 1995), amended LR 22:1212 (December 1996), LR 23:1507 (November 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:747 (April 2004).

Subchapter L. Limiting Volatile Organic Compound (VOC) Emissions from Cleanup Solvent Processing

§2151. Limiting VOC Emissions from Cleanup Solvent Processing

A. Applicability. The provisions of this Subchapter apply to stationary sources that emit, or have the potential to emit, 25 TPY or more of VOC and conduct one or more of the affected cleaning operations in the parish of Ascension, East Baton Rouge, Iberville, Livingston, or West Baton Rouge, or 50 TPY or more of VOC and conduct one or more of the affected cleaning operations in the parish of Calcasieu or Pointe Coupee. Once a source is subject to this Subchapter, it shall be so ad infinitum. Affected cleaning operations are ones that use solvents in the following operations:

A.1. – E. …

F. Timing. A facility that has become subject to this regulation as a result of a revision of the regulation shall

comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:391 (April 1995), amended LR 24:25 (January 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 30:747 (April 2004).

Subchapter M. Limiting Volatile Organic Compound (VOC) Emissions From Industrial Wastewater

§2153. Limiting VOC Emissions From Industrial Wastewater

A. Definitions. Unless specifically defined in LAC 33:III.111, the terms in this Chapter shall have the meanings normally used in the field of air pollution control. Additionally the following meanings apply, unless the context clearly indicates otherwise.

Affected Source Category—any facilities of the following source categories located in the parishes of Ascension, East Baton Rouge, Iberville, Livingston, and West Baton Rouge and having the potential to emit 25 TPY or more of VOC, or located in the parishes of Calcasieu and Pointe Coupee and having the potential to emit 50 TPY or more of VOC:

a. – d. …

* * *

B. – H.5. …

I. Parishes and Compliance Schedules. For the affected facilities in the parishes of Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge, any person who is the owner or operator of an affected source category within a plant shall be in compliance with these regulations no later than November 15, 1996. If an additional affected VOC wastewater stream is generated as a result of a process change, the wastewater shall be in compliance with this Section upon initial startup or by November 15, 1998, whichever is later, unless the owner or operator demonstrates to the administrative authority* that achieving compliance will take longer. If this demonstration is satisfactory to the administrative authority*, compliance shall be achieved as expeditiously as practicable, but in no event later than three years after the process change. An existing wastewater stream that becomes an affected VOC wastewater stream due to a process change must be in compliance with this Section as expeditiously as practicable, but in no event later than three years after the process change. A facility that has become subject to this regulation as a result of a revision of the regulation shall comply with the requirements of this Section as soon as practicable, but in no event later than one year from the promulgation of the regulation revision.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 21:936 (September 1995), amended LR 22:1212 (December 1996), LR 24:26 (January 1998), LR 25:850 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2453 (November 2000), LR 28:1765 (August 2002), LR 30:747 (April 2004).

Subchapter N. Method 43—Capture Efficiency Test Procedures

§2160. Procedures

A. Except as provided in Subsection C of this Section, the regulations at 40 CFR Part 51, Appendix M, July 1, 2003, are hereby incorporated by reference.

B. – C.2.b.iv. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 17:653 (July 1991), amended LR 22:1212 (December 1996), LR 23:1680 (December 1997), LR 24:1286 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1224 (August 2001), LR 29:698 (May 2003), LR 30:1009 (May 2004).

Chapter 22. Control of Emissions of Nitrogen Oxides (NO_x)

§2201. Affected Facilities in the Baton Rouge Nonattainment Area and the Region of Influence

A. – A.3. …

B. Definitions. Unless specifically defined in this Subsection or in LAC 33:III.111 or 502, the words, terms, and abbreviations in this Chapter shall have the meanings commonly used in the field of air pollution control. For purposes of this Chapter only, the following definitions shall supersede any definitions in LAC 33:III.111 or 502.

* * *

Affected Facility—any facility within the Baton Rouge Nonattainment Area with one or more affected point sources that collectively emit or have the potential to emit 25 tons or more per year of NO_x, unless exempted in Subsection C of this Section, or any facility within the Region of Influence with one or more affected point sources that collectively emit or have the potential to emit 50 tons or more per year of NO_x, unless exempted in Subsection C of this Section.

* * *

Averaging Capacity—the average actual heat input rate in million British thermal units per hour (MMBtu/hour) at which an affected point source operated during the ozone season of the two calendar years of 2000 and 2001 (e.g., the total heat input for the period divided by the actual hours of operation for the same period). Another period may be used to calculate the averaging capacity if approved by the

department. For units with permit revisions that legally curtailed capacity or that were permanently shut down after 1997, the averaging capacity is the average actual heat input during the last two ozone seasons of operation before the curtailment or shutdown.

* * *

Combined Cycle—a combustion equipment configuration that generates electrical or mechanical power with a stationary gas or liquid-fired turbine and/or a stationary internal combustion engine and that recovers heat from the discharge within equipment to heat water or generate steam.

* * *

Low Ozone Season Capacity Factor Boiler or Process Heater/Furnace—a boiler or process heater/furnace in the Baton Rouge Nonattainment Area with maximum rated capacity greater than or equal to 40 MMBtu/hour and ozone season heat input less than or equal to 0.46×10^{11} Btu, or in the Region of Influence with maximum rated capacity greater than or equal to 80 MMBtu/hour and ozone season heat input less than or equal to 0.92×10^{11} Btu.

* * *

Nitrogen Oxides (NO_x)—the sum of the nitric oxide and nitrogen dioxide in a stream measured in accordance with Subsection G of this Section.

* * *

C. …

1. boilers and process heater/furnaces with a maximum rated capacity of less than 40 MMBtu/hour in the Baton Rouge Nonattainment Area or less than 80 MMBtu/hour in the Region of Influence;

2. stationary gas turbines with a megawatt rating based on heat input of less than 5 MW in the Baton Rouge Nonattainment Area or less than 10 MW in the Region of Influence;

3. stationary internal combustion engines as follows:

a. rich-burn engines with a rating of less than 150 horsepower (Hp) in the Baton Rouge Nonattainment Area or less than 300 Hp in the Region of Influence; and

b. lean-burn engines with a rating of less than 150 Hp in the Baton Rouge Nonattainment Area or less than 1500 Hp in the Region of Influence;

4. – 7. …

8. any point source during start-up and shutdown as defined in LAC 33:III.111 or during a malfunction as defined in 40 CFR Section 60.2 (This exemption does not apply to units that are shut down intentionally on a routine basis—more than once per month.);

9. – 20. …

D. Emission Factors

1. Except as provided in LAC 33:III.2202, the following tables list NO_x emission factors that shall apply to affected point sources located at affected facilities in the Baton Rouge Nonattainment Area or the Region of Influence.

Table D-1A. Emission Factors for Sources in the Baton Rouge Nonattainment Area		
Category	Maximum Rated Capacity	NO_x Emission Factor [a]
Electric Power Generating System Boilers:		
Coal-fired	>/= 40 to <80 MMBtu/Hour	0.50 pound/MMBtu
	>/= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>/= 40 to <80 MMBtu/Hour	0.30 pound/MMBtu
	>/= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>/= 40 to <80 MMBtu/Hour	0.20 pound/MMBtu
	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Industrial Boilers	>/= 40 to <80 MMBtu/Hour	0.20 pound/MMBtu
	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>/= 40 to <80 MMBtu/Hour	0.30 pound/MMBtu
	>/= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>/= 40 to <80 MMBtu/Hour	0.18 pound/MMBtu
	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:		
Peaking Service, Fuel Oil-fired	>/= 5 to <10 MW	0.37 pound/MMBtu
	>/= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>/= 5 to <10 MW	0.27 pound/MMBtu
	>/= 10 MW	0.20 pound/MMBtu
All Others	>/= 5 to <10 MW	0.24 pound/MMBtu[b]
	>/= 10 MW	0.16 pound/MMBtu[c]
Stationary Internal Combustion Engines:		
Lean-burn	>/= 150 to <320 Hp	10 g/Hp-hour
	>/= 320 Hp	4 g/Hp-hour
Rich-burn	>/= 150 to <300 Hp	2 g/Hp-hour
	>/= 300 Hp	2 g/Hp-hour

[a] based on the higher heating value of the fuel.
[b] equivalent to 65 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu.
[c] equivalent to 43 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu.

Table D-1B. Emission Factors for Sources in the Region of Influence		
Category	Maximum Rated Capacity	NO_x Emission Factor [a]
Electric Power Generating System Boilers:		
Coal-fired	>/= 80 MMBtu/Hour	0.21 pound/MMBtu
Number 6 Fuel Oil-fired	>/= 80 MMBtu/Hour	0.18 pound/MMBtu
All Others (gaseous or liquid)	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Industrial Boilers	>/= 80 MMBtu/Hour	0.10 pound/MMBtu
Process Heater/Furnaces:		
Ammonia Reformers	>/= 80 MMBtu/Hour	0.23 pound/MMBtu
All Others	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines:		
Peaking Service, Fuel Oil-fired	>/= 10 MW	0.30 pound/MMBtu
Peaking Service, Gas-fired	>/= 10 MW	0.20 pound/MMBtu
All Others	>/= 10 MW	0.16 pound/MMBtu[b]
Stationary Internal Combustion Engines:		
Lean-burn	>/= 1500 Hp	4 g/Hp-hour
Rich-burn	>/= 300 Hp	2 g/Hp-hour

[a] all factors are based on the higher heating value of the fuel.
[b] equivalent to 43 ppmv (15 percent O_2, dry basis) with an F factor of 8710 dscf/MMBtu.

2. – 3. …

4. For all other affected point sources, the emission factors from Subsection D of this Section shall apply as the mass of NO_x emitted per unit of heat input (pounds NO_x per MMBtu or grams NO_x per Hp-hour), on a 30-day rolling average basis. Alternatively, a facility may choose to comply with a cap as detailed in Paragraph D.3 of this Section, provided that a system, approved by the department, is installed, calibrated, maintained, and operated to demonstrate compliance.

D.5. – F.1. …

a. An owner or operator may obtain approval to install and operate NO_x control equipment that does not result in ammonia emissions above the minimum emission rate (MER) in LAC 33:III.Chapter 51 by submitting documentation in accordance with LAC 33:III.511. This documentation shall include an estimate of any carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM_{10}), and/or volatile organic compound (VOC) emission increases associated with the NO_x control technology. If approved, the administrative authority shall grant an authorization to construct and operate in accordance with LAC 33:III.501.C.3. Any appropriate permit application reflecting the emission reduction shall be submitted to the department and deemed administratively complete no later than 180 days after commencement of operation and in accordance with the procedures of LAC 33:III.Chapter 5.

1.b. – 4. …

5. Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) Considerations. A significant net emissions increase in NO_x, CO, SO_2, PM_{10}, and/or VOC in accordance with LAC 33:III.504 or 509, that is a direct result of, and incidental to, the installation of NO_x control equipment or implementation of a NO_x control technique required to comply with the provisions of this Chapter shall be exempt from the requirements of LAC 33:III.509 and/or 504, as appropriate, provided the following conditions are met:

a. – b.ii. …

c. notwithstanding the requirements of Table 1 of LAC 33:III.504, a significant net increase of VOC emissions at an affected facility located in the Baton Rouge Nonattainment Area shall be offset at a ratio of at least 1:1. Offsets shall be surplus, permanent, quantifiable, and federally enforceable and calculated in accordance with LAC 33:III.Chapter 6; and

F.5.d. – G.1. …

2. Emissions testing is required for all point sources that are subject to the emission limitations of Subsection D of this Section or used in one of the alternative plans of Subsection E of this Section. Test results must demonstrate that actual NO_x emissions are in compliance with the appropriate limits of this Chapter. As applicable, CO, SO_2, PM_{10}, and VOC shall also be measured if modifications, done to comply with this Chapter, could cause an increase in emissions of any of these compounds. Performance testing of these point sources shall be performed in accordance with the schedule specified in Subsection J of this Section.

G.3. – H. …

1. The owner or operator of boilers that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. – b.ii. …

iii. install, calibrate, maintain, and operate a NO_x CEMS to demonstrate continuous compliance with the NO_x emission factors of Subsection D or E of this Section, as applicable. The CEMS shall meet all of the requirements of 40 CFR Part 60.13 and performance specification 2 of 40 CFR 60, Appendix B, or the requirements of 40 CFR Part 75 for units regulated under the Acid Rain Program; and

iv. – vi. …

2. The owner or operator of process heater/furnaces that are subject to this Chapter shall demonstrate continuous compliance as follows:

a. – b.vi. …

3. The owner or operator of stationary gas turbines that are subject to this Chapter shall demonstrate continuous compliance as follows:

H.3.a. – I.5. …

J. Effective Dates

1. Except as provided in LAC 33:III.2202, the owner or operator of an affected facility shall modify and/or install and bring into normal operation NO_x control equipment and/or NO_x monitoring systems in accordance with this Chapter as expeditiously as possible, but by no later than May 1, 2005.

2. Except as provided in LAC 33:III.2202, the owner or operator shall complete all initial compliance testing, specified by Subsection G of this Section, for equipment modified with NO_x reduction controls or a NO_x monitoring system to meet the provisions of this Chapter within 60 days of achieving normal production rate or after the end of the shake down period, but in no event later than 180 days after initial start-up. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than November 1, 2005.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:290 (February 2002), repromulgated LR 28:451 (March 2002), amended LR 28:1578 (July 2002), LR 30:748 (April 2004), LR 30:1170 (June 2004).

§2202. Contingency Plan

A. This Section shall become effective only in the event that the United States Environmental Protection Agency (EPA) determines and notifies the department in accordance with Section 181(b)(2) of the Clean Air Act as amended [42 USC 7511(b)(2)] that the Baton Rouge Nonattainment Area has failed to attain the 1-hour ozone National Ambient Air Quality Standard (NAAQS) by its appropriate attainment deadline (November 15, 2005, for areas classified as "severe") or, following application for extension by the state, any extension of the deadline approved by the EPA in accordance with Section 181(a)(5) of the Clean Air Act as amended [42 USC 7511(a)(5)].

B. Emission Factors. The emission factors for the sources listed below in Table B-1 shall supersede the factors for the like sources in Table D-1A of LAC 33:III.2201.D.1. All requirements of LAC 33:III.2201 shall remain applicable to such sources, except as superseded by this Section.

Table B-1. Contingency Plan Emission Factors

Category	Maximum Rated Capacity	NO_x Emission Factor [a]
Industrial Boilers	>/= 80 MMBtu/Hour	0.08 pound/MMBtu
Stationary Gas Turbines (except peaking)	>/= 10 MW	0.092 pound/MMBtu

[a] based on the higher heating value of the fuel.

C. Effective Dates

1. An owner or operator of a source subject to an emission factor provided in Table B-1 of Subsection B of this Section shall comply with such emission factor as expeditiously as possible, but not later than two years after determination and notification by the EPA in accordance with Subsection A of this Section.

2. Required testing to demonstrate the performance of existing, unmodified equipment shall be completed in a timely manner, but by no later than 30 months after determination and notification by the EPA in accordance with Subsection A of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:1170 (June 2004).

Chapter 30. Standards of Performance for New Stationary Sources (NSPS)

Subchapter A. Incorporation by Reference (IBR)

§3003. IBR 40 *Code of Federal Regulations* (CFR) Part 60

A. Except as modified in this Section, Standards of Performance for New Stationary Sources, published in the *Code of Federal Regulations* at 40 CFR Part 60, July 1, 2003, are hereby incorporated by reference as they apply to the state of Louisiana.

B. – B.6. …

7. 40 CFR Part 60, Subpart B, Adoption and Submittal of State Plans for Designated Facilities, and 40 CFR Part 60, Subpart C, Emission Guidelines and Compliance Times, are not included in this incorporation by reference.

8. The minimum standards of the following emission guidelines of 40 CFR Part 60 that are incorporated by reference shall be applied to applicable units in the state:

40 CFR Part 60	Subpart Heading
Subpart Cb	Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994
Subpart Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
Subpart Cd	Emission Guidelines and Compliance Times for Sulfuric Acid Production Units
Subpart Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators
Subpart AAA	Standards of Performance for New Residential Wood Heaters
Subpart BBBB	Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or Before August 30, 1999
Subpart DDDD	Emission Guidelines and Compliance Times for Commercial and Industrial Waste Incineration Units That Commenced Construction On or Before November 30, 1999

C. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, Permits Division, or from a public library.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 22:1212 (December 1996), amended LR 23:1681 (December 1997), LR 24:1287 (July 1998), LR 24:2238 (December 1998), LR 25:1239 (July 1999), LR 25:1797 (October 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:1607 (August 2000), LR 26:2460, 2608 (November 2000), LR 27:2229 (December 2001), LR 28:994 (May 2002), LR 28:2179 (October 2002), LR 29:316 (March 2003), LR 29:698 (May 2003), LR 30:1009 (May 2004).

Chapter 51. Comprehensive Toxic Air Pollutant Emission Control Program

Subchapter B. Incorporation by Reference of 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants)

§5116. Incorporation by Reference of 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants)

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants, published in the *Code of Federal Regulations* at 40 CFR Part 61, July 1, 2003, and specifically listed in the following table, are hereby incorporated by reference as they apply to sources in the state of Louisiana.

40 CFR Part 61	Subpart /Appendix Heading
* * *	
[See Prior Text in Subpart A – Appendix C]	

B. – B.2. …

C. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, Permits Division, or from a public library.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:61 (January 1997), amended LR 23:1658 (December 1997), LR 24:1278 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 25:1797 (October 1999), LR 26:2271 (October 2000), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2179 (October 2002), LR 29:699 (May 2003), LR 30:1009 (May 2004).

Subchapter C. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as it Applies to Major Sources

§5122. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as it Applies to Major Sources

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants for Source Categories, published in the *Code of Federal Regulations* at 40 CFR Part 63, July 1, 2003, are hereby incorporated by reference as they apply to major sources in the state of Louisiana.

B. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, Permits Division, or from a public library.

C. – C.2. …

3. 40 CFR Part 63, Subpart E, Approval of State Programs and Delegation of Federal Authorities, is not included in this incorporation by reference.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:61 (January 1997), amended LR 23:1659 (December 1997), LR 24:1278 (July 1998), LR 24:2240 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 25:1798 (October 1999), LR 26:690 (April 2000), LR 26:2271 (October 2000), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2180 (October 2002), LR 29:699 (May 2003), LR 29:1474 (August 2003), LR 30:1010 (May 2004).

Chapter 53. Area Sources of Toxic Air Pollutants

Subchapter B. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as it Applies to Area Sources

§5311. Incorporation by Reference of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) as it Applies to Area Sources

A. Except as modified in this Section and specified below, National Emission Standards for Hazardous Air Pollutants for Source Categories, published in the *Code of Federal Regulations* at 40 CFR Part 63, July 1, 2003, and specifically listed in the following table, are hereby incorporated by reference as they apply to area sources in the state of Louisiana.

40 CFR Part 63	Subpart /Appendix Heading
* * *	
[See Prior Text in Subparts A – VVV]	
Subpart AAAA	National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

B. Copies of documents incorporated by reference in this Chapter may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20242 or their website, www.gpoaccess.gov/cfr/index.html, from the Department of Environmental Quality, Office of Environmental Services, Permits Division, or from a public library.

C. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 23:63 (January 1997), amended LR 23:1660 (December 1997), LR 24:1279 (July 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1464 (August 1999), LR 27:2230 (December 2001), LR 28:995 (May 2002), LR 28:2180 (October 2002), LR 29:699 (May 2003), LR 30:1010 (May 2004).

Chapter 59. Chemical Accident Prevention and Minimization of Consequences

Subchapter A. General Provisions

§5901. Incorporation by Reference of Federal Regulations

A. Except as provided in Subsection C of this Section, the department incorporates by reference 40 CFR Part 68, July 1, 2003.

B. – C.6. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2054 and 30:2063.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Air Quality Division, LR 20:421 (April 1994), amended LR 22:1124 (November 1996), repromulgated LR 22:1212 (December 1996), amended LR 24:652 (April 1998), LR 25:425 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:70 (January 2000). LR 26:2272 (October 2000), LR 28:463 (March 2002), LR 29:699 (May 2003), LR 30:1010 (May 2004).

Title 33
ENVIRONMENTAL QUALITY
Part V. Hazardous Waste and Hazardous Materials
Subpart 1. Department of Environmental Quality—Hazardous Waste
Chapter 30. Hazardous Waste Burned in Boilers and Industrial Furnaces

§3099. Appendices–Appendix A, B, C, D, E, F, G, H, I, J, K, and L

Appendix A. Tier I and Tier II Feed Rate and Emissions Screening Limits For Metals

A. 40 CFR 266, Appendix I, July 1, 2003, is hereby incorporated by reference.

Appendix B. Tier I Feed Rate Screening Limits for Total Chlorine

A. 40 CFR 266, Appendix II, July 1, 2003, is hereby incorporated by reference.

Appendix C. Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride

A. 40 CFR 266, Appendix III, July 1, 2003, is hereby incorporated by reference.

Appendix D. Reference Air Concentrations

A. 40 CFR 266, Appendix IV, July 1, 2003, is hereby incorporated by reference, except that in regulations incorporated thereby, references to 40 CFR 261, Appendix VIII and 266, Appendix V shall mean LAC 33:V.3105.Table 1 and 3099.Appendix E, respectively.

Appendix E. Risk Specific Doses (10^{-5})

A. 40 CFR 266, Appendix V, July 1, 2003, is hereby incorporated by reference.

Appendix F. Stack Plume Rise [Estimated Plume Rise (in Meters) Based on Stack Exit Flow Rate and Gas Temperature]

A. 40 CFR 266, Appendix VI, July 1, 2003, is hereby incorporated by reference.

Appendix G. Health-Based Limits for Exclusion of Waste-Derived Residues

A. 40 CFR 266, Appendix VII, July 1, 2003, is hereby incorporated by reference, except that in regulations incorporated thereby, 40 CFR 261, Appendix VIII, 266.112(b)(1) and (b)(2)(i), and 268.43 shall mean LAC 33:V.3105.Table 1, 3025.B.1 and B.2.a, and Chapter 22.Table 2, respectively.

Appendix H. Organic Compounds for Which Residues Must be Analyzed

A. 40 CFR 266, Appendix VIII, July 1, 2003, is hereby incorporated by reference.

Appendix I. Methods Manual for Compliance with the BIF Regulations

A. 40 CFR 266, Appendix IX, July 1, 2003, is hereby incorporated by reference, except as follows.

A.1. – B. …

Appendix J. Lead-Bearing Materials That May Be Processed in Exempt Lead Smelters

A. 40 CFR 266, Appendix XI, July 1, 2003, is hereby incorporated by reference.

Appendix K. Nickel or Chromium-Bearing Materials That May Be Processed in Exempt Nickel-Chromium Recovery Furnaces

A. 40 CFR 266, Appendix XII, July 1, 2003, is hereby incorporated by reference, except that the footnote should be deleted.

Appendix L. Mercury-Bearing Wastes That May Be Processed in Exempt Mercury Recovery Units

A. 40 CFR 266, Appendix XIII, July 1, 2003, is hereby incorporated by reference, except that in regulations incorporated thereby, 40 CFR 261, Appendix VIII shall mean LAC 33:V.3105.Table 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 22:827 (September 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:300 (March 2001), LR 27:2231 (December 2001), LR 28:996 (May 2002), LR 29:700 (May 2003), LR 30:751 (April 2004).

Title 33
ENVIRONMENTAL QUALITY
Part IX. Water Quality
Subpart 2. The Louisiana Pollutant Discharge Elimination System (LPDES) Program
Chapter 23. Definitions and General LPDES Program Requirements

§2301. General Conditions

A. – E. …

F. All references to the *Code of Federal Regulations* (CFR) contained in this Chapter shall refer to those regulations published in the July 1, 2003 CFR, unless otherwise noted.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular 2074(B)(3) and (4).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 21:945 (September 1995), amended LR 23:199 (February 1997), LR 23:722 (June 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1467 (August 1999), LR 26:1609 (August 2000), LR 27:2231 (December 2001), LR 28:996 (May 2002), LR 29:700 (May 2003), LR 30:752 (April 2004).

Chapter 49. Incorporation by Reference

§4901. 40 CFR Part 136

A. 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, July 1, 2003, in its entirety, and amendments to Part 136 in 68 FR 43271-43283, July 21, 2003, and 68 FR 54934, September 19, 2003, are hereby incorporated by reference.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular 2074(B)(3) and (4).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 21:945 (September 1995), amended LR 23:958 (August 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1467 (August 1999), LR 26:1609 (August 2000), LR 27:2231 (December 2001), LR 28:996 (May 2002), LR 29:700 (May 2003), repromulgated LR 30:232 (February 2004), amended LR 30:752 (April 2004).

§4903. 40 CFR Chapter I, Subchapter N

A. 40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401 and 405-471, July 1, 2003, are hereby incorporated by reference.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq., and in particular Section 2074(B)(3) and (4).

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Water Resources, LR 21:945 (September 1995), amended LR 23:958 (August 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1467 (August 1999), LR 26:1609 (August 2000), LR 27:2232 (December 2001), LR 28:996 (May 2002), LR 29:700 (May 2003), LR 29:1467 (August 2003), repromulgated LR 30:232 (February 2004), amended LR 30:752 (April 2004).

Title 33
ENVIRONMENTAL QUALITY
Part XV. Radiation Protection
Chapter 1. General Provisions

§102. Definitions and Abbreviations

As used in these regulations, these terms have the definitions set forth below. Additional definitions used only in a certain chapter may be found in that chapter.

* * *

Address of Use—the building or buildings that are identified on the license and where radioactive material may be received, prepared, used, or stored.

* * *

Authorized Medical Physicist—an individual who is identified as an authorized medical physicist or teletherapy physicist on:

1. a specific medical use license issued by the department, the U.S. Nuclear Regulatory Commission, or an agreement state;

2. a medical use permit issued by a U.S. Nuclear Regulatory Commission master material licensee;

3. a permit issued by the department, the U.S. Nuclear Regulatory Commission, or an agreement state broad scope medical use licensee; or

4. a permit issued by a U.S. Nuclear Regulatory Commission master material license broad scope medical use permittee.

* * *

Brachytherapy Source—a radioactive source or a manufacturer-assembled source train or a combination of these sources that is designed to deliver a therapeutic dose within a distance of a few centimeters.

* * *

Client's Address—the area of use or a temporary jobsite for the purpose of providing mobile medical service in accordance with LAC 33:XV.726.

* * *

Dentist—an individual licensed by a state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

* * *

High Dose-Rate Remote Afterloader—a brachytherapy device that remotely delivers a dose rate in excess of 12 gray (1200 rads) per hour at the point or surface where the dose is prescribed.

* * *

Low Dose-Rate Remote Afterloader—a brachytherapy device that remotely delivers a dose rate of less than or equal to 2 gray (200 rads) per hour at the point or surface where the dose is prescribed.

* * *

Manual Brachytherapy—a type of brachytherapy in which the brachytherapy sources (e.g., seeds, ribbons) are manually placed topically on or inserted either into the body cavities that are in close proximity to a treatment site or directly into the tissue volume.

Medical Event—an event that meets the criteria in LAC 33:XV.712.A.

* * *

Medium Dose-Rate Remote Afterloader—a brachytherapy device that remotely delivers a dose rate of greater than 2 gray (200 rads), but less than 12 gray (1200 rads), per hour at the point or surface where the dose is prescribed.

* * *

Metric Prefixes and Abbreviations—

c	centi	$(=10^{-2})$	f	femto	$(=10^{-15})$
m	milli	$(=10^{-3})$	k	kilo	$(=10^{3})$
μ	micro	$(=10^{-6})$	M	mega	$(=10^{6})$
n	nano	$(=10^{-9})$	G	giga	$(=10^{9})$
p	pico	$(=10^{-12})$	T	tera	$(=10^{12})$

* * *

Misadministration—Repealed.

Mobile Medical Service—the transportation of radioactive material to, and its medical use at, the client's address.

* * *

Output—the exposure rate, dose rate, or a quantity related in a known manner to these rates from a brachytherapy source or a teletherapy unit, a remote afterloader, or a gamma stereotactic radiosurgery unit for a specified set of exposure conditions.

* * *

Patient Intervention—actions by the patient or human research subject, whether intentional or unintentional, such as dislodging or removing treatment devices or prematurely terminating the administration.

* * *

Physician—a medical doctor or doctor of osteopathy licensed by a state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine, or who is authorized to practice medicine under the provisions of R.S. 37:1261 et seq.

Podiatrist—an individual licensed by a state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

Preceptor—an individual who provides or directs the training and experience required for an individual to become an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, or a radiation safety officer.

* * *

Prescribed Dose—

1. – 2. …

3. for manual brachytherapy, either the total source strength and exposure time or the total dose, as documented in the written directive; or

4. for remote brachytherapy afterloaders, the total dose and dose per fraction in the written directive.

* * *

Pulsed Dose-Rate Remote Afterloader—a special type of remote afterloading brachytherapy device that uses a single source capable of delivering dose rates in the "high dose-rate" range, but:

1. is approximately one-tenth of the activity of typical high dose-rate remote afterloader sources; and

2. is used to simulate the radiobiology of a low dose-rate treatment by inserting the source for a given fraction of each hour.

* * *

Sealed Source and Device Registry—the national registry that contains all the registration certificates, generated by both the U.S. Nuclear Regulatory Commission and the agreement states, that summarize the radiation safety information for the sealed sources and devices and describe the licensing and use conditions approved for the products.

Shallow Dose Equivalent (H_s)—applies to the external exposure of the skin of the whole body or the skin of an extremity, and is taken as the dose equivalent at a tissue depth of 0.007 centimeter (7 mg/cm^2).

* * *

Stereotactic Radiosurgery—the use of external radiation in conjunction with a stereotactic guidance device to very precisely deliver a therapeutic dose to a tissue volume.

Structured Educational Program—an educational program designed to impart particular knowledge and practical education through interrelated studies and supervised training.

* * *

Therapeutic Dosage—a dosage of unsealed radioactive material that is intended to deliver a radiation dose to a patient or human research subject for palliative or curative treatment.

Therapeutic Dose—a radiation dose delivered from a source containing radioactive material to a patient or human research subject for palliative or curative treatment.

* * *

Treatment Site—the anatomical description of the tissue intended to receive a radiation dose, as described in a written directive.

Type of Use—use of radioactive material as described in LAC 33:XV.729, 731, 735, 739, 741, or 747.

* * *

Unit Dosage—a dosage prepared for medical use for administration as a single dosage to a patient or human research subject without any further manipulation of the dosage after it is initially prepared.

* * *

Year—the period of time beginning in January used to determine compliance with the provisions of these regulations. The licensee or registrant may change the starting date of the year used to determine compliance by the licensee or registrant provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 19:1421 (November 1993), LR 20:650 (June 1994), LR 22:967 (October 1996), LR 24:2089 (November 1998), repromulgated LR 24:2242 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2563 (November 2000), LR 26:2767 (December 2000), LR 30:1171, 1188 (June 2004).

§104. Records

A. – C. …

D. Each licensee and registrant shall maintain the records required by LAC 33:XV.104, 421, 451, and all other applicable portions of these regulations at the authorized location of storage and/or use.

E. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1173 (June 2004).

§110. Prohibited Uses

A. – D. …

E. No person shall intentionally apply or allow to be applied, either directly or indirectly, radiation to human beings except by, or under the supervision of, persons licensed by Louisiana to practice the healing arts and who are authorized to use radiation on humans.

1. *Supervision*, as used in this Subsection, shall mean the responsibility for, and control of, quality, radiation safety, and technical aspects of the application of radiation to human beings for diagnostic and therapeutic purposes.

2. This prohibition shall not be deemed to apply to persons who are exposed to radiation occupationally, or as otherwise provided in these regulations.

NOTE: Repealed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2564 (November 2000), LR 30:1188 (June 2004).

Chapter 3. Licensing of Radioactive Material

Subchapter D. Specific Licenses

§326. Special Requirements for Issuance of Certain Specific Licenses for Radioactive Material

A. – E.1.b. …

c. The applicant will have an adequate internal inspection system, or other management control, to ensure that license provisions, regulations, and the applicant's operating and emergency procedures are followed by radiographers; the inspection system shall include the performance of internal inspections not to exceed six months and the retention of records of such inspections for three consecutive years.

d. – k. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2092 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2569 (November 2000), LR 27:1228 (August 2001), LR 30:1188 (June 2004).

Chapter 4. Standards for Protection Against Radiation

Subchapter B. Radiation Protection Programs

§410. Occupational Dose Limits for Adults

A. - A.1.b. …

2. the annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities, which are:

a. …

b. a shallow dose equivalent of 0.5 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.

B. …

C. The assigned deep dose equivalent must be for the part of the body receiving the highest exposure. The assigned shallow dose equivalent must be the dose averaged over the contiguous 10 square centimeters of skin receiving the highest exposure. The deep dose equivalent, lens dose equivalent, and shallow dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure or the results of individual monitoring are unavailable.

D. If a protective apron is worn while working with medical fluoroscopic equipment and monitoring is conducted as specified in LAC 33:XV.431, the effective dose equivalent for external radiation shall be determined using one of the following methods.

1. When only one individual monitoring device is used and it is located at the neck outside the protective apron, the reported deep dose equivalent shall be the effective dose equivalent for external radiation.

2. When only one individual monitoring device is used and it is located at the neck outside the protective apron, and the reported dose exceeds 25 percent of the limit specified in this Section, the reported deep dose equivalent value, multiplied by 0.3, shall be the effective dose equivalent for external radiation.

3. When individual monitoring devices are worn, both under the protective apron at the waist and outside the protective apron at the neck, the effective dose equivalent for external radiation shall be assigned the value of the sum of the deep dose equivalent reported for the individual monitoring device located at the waist under the protective apron, multiplied by 1.5, and the deep dose equivalent reported for the individual monitoring device located at the neck outside the protective apron, multiplied by 0.04.

E. Derived air concentration (DAC) and annual limit on intake (ALI) values are specified in Table I of Appendix B and may be used to determine the individual's dose and to demonstrate compliance with the occupational dose limits. See LAC 33:XV.476.

F. Notwithstanding the annual dose limits, the licensee shall limit the soluble uranium intake by an individual to 10 milligrams in a week in consideration of chemical toxicity. See Endnote 3 of Appendix B.

G. The licensee or registrant shall reduce the dose that an individual may be allowed to receive in the current year by the amount of occupational dose received while employed by any other person. See LAC 33:XV.414.E and F.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 19:1421 (November 1993), LR 22:969 (October 1996), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2769 (December 2000), LR 30:1188 (June 2004).

Subchapter J. Reports

§492. Reports of Leaking or Contamination From Sealed Sources

A. The licensee or registrant shall file a report within five days with the Office of Environmental Compliance using the procedures provided in LAC 33:I.3925 if the test for leakage or contamination required in accordance with LAC 33:XV.426 indicates a sealed source is leaking or a source of contamination. The report shall include the equipment involved, its model number and serial number if assigned, the estimated activity of the source, the test results, the date of the test, and the corrective action taken.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 19:1421 (November 1993), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2580 (November 2000), LR 30:1173 (June 2004).

Chapter 5. Radiation Safety Requirements for Industrial Radiographic Operations

§503. Definitions

A. As used in this Chapter, the following definitions apply.

* * *

Permanent Radiographic Installation—an enclosed shielded room, cell, or vault, not located at a temporary jobsite, in which radiography is performed.

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), LR 23:1138 (September 1997), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2581 (November 2000), LR 26:2772 (December 2000), LR 27:1231 (August 2001), LR 29:34 (January 2003), LR 30:1189 (June 2004).

Subchapter A. Equipment Control

§541. Locking of Sources of Radiation

A. Each radiographic exposure device must have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The exposure device and/or its container must be kept locked, with the key removed at all times for a keyed-lock, when not under the direct surveillance of a radiographer or a trainee except at permanent radiographic installations in accordance with LAC 33:XV.585. In addition, during radiographic operations the sealed source assembly must be secured in the shielded position each time the source is returned to that position.

B. Each sealed source storage container and source changer must have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. Storage containers and source changers must be kept locked, with the key removed at all times for a keyed-lock, when containing sealed sources, except when under the direct surveillance of a radiographer or trainee.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 20:653 (June 1994), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1232 (August 2001), LR 28:306 (February 2002), LR 30:1189 (June 2004).

Chapter 7. Use of Radionuclides in the Healing Arts

§703. License Amendments and Provisions for Research Involving Human Subjects

A. – A.6 …

B. A licensee may conduct research involving human subjects using radioactive material, provided that the research is conducted, funded, supported, or regulated by a federal agency that has implemented the Federal Policy for the Protection of Human Subjects.

C. If the research will not be conducted, funded, supported, or regulated by a federal agency that has implemented the Federal Policy for the Protection of Human Subjects, the licensee shall, before conducting research, apply for and receive a specific amendment to its U.S. Nuclear Regulatory Commission medical use license. The amendment request must include a written commitment that the licensee will, before conducting research:

1. obtain review and approval of the research from an *Institutional Review Board*, as defined and described in the Federal Policy; and

2. obtain *informed consent*, as defined and described in the Federal Policy, from the human research subject.

D. Nothing in this Section relieves licensees from complying with the other requirements in this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2101 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2587 (November 2000), LR 30:1173 (June 2004).

§704. Notifications

A. – B. …

1. an authorized user, an authorized nuclear pharmacist, a radiation safety officer, or an authorized medical physicist permanently discontinues performance of duties under the license or has a name change; or

2. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2101 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2587 (November 2000), LR 30:1173 (June 2004).

§709. Supervision

A. – A.1. …

2. require the supervised individual to follow the instructions of the supervising authorized user, written radiation protection procedures established by the licensee, written directive procedures, regulations of this Chapter, and license conditions with respect to the medical use of radioactive material;

3. review the supervised individual's use of radioactive material, provide reinstruction as needed, and review records kept to reflect this use;

4. require the authorized user to be immediately available to communicate with the supervised individual;

5. require the authorized user to be able to be physically present and available to the supervised individual on one hour's notice (The supervising authorized user need not be present for each use of radioactive material.); and

6. require that only those individuals specifically trained, and designated by the authorized user, shall be permitted to administer radionuclides or radiation to patients.

B. – D. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2102 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1173 (June 2004).

§710. Report and Notification of a Dose to an Embryo/Fetus or a Nursing Child

A. A licensee shall report any dose to an embryo/fetus that is greater than 50 mSv (5 rem) dose equivalent that is a result of an administration of radioactive material to a pregnant individual unless the dose to the embryo/fetus was specifically approved, in advance, by the authorized user.

B. A licensee shall report any dose to a nursing child that is a result of an administration of radioactive material to a breast-feeding individual that:

1. is greater than 50 mSv (5 rem) total effective dose equivalent; or

2. has resulted in unintended permanent functional damage to an organ or a physiological system of the child, as determined by a physician.

C. The licensee shall notify the Office of Environmental Compliance in the manner provided in LAC 33:I.3923 no later than the next calendar day after discovery of a dose to the embryo/fetus or nursing child that requires a report in accordance with Subsection A or B of this Section.

D. The licensee shall submit a written report to the Office of Environmental Compliance in the manner provided in LAC 33:I.3925 within 15 days after discovery of a dose to the embryo/fetus or nursing child that requires a report in accordance with Subsection A or B of this Section.

1. The written report shall include:

a. the licensee's name;

b. the name of the prescribing physician;

c. a brief description of the event;

d. why the event occurred;

e. the effect, if any, on the embryo/fetus or the nursing child;

f. what actions, if any, have been taken or are planned to be taken to prevent recurrence; and

g. certification that the licensee notified the pregnant individual or mother (or the mother's or child's responsible relative or guardian) in accordance with Subsection E of this Section and, if not, why not.

2. The report shall not contain the individual's or child's name or any other information that could lead to identification of the individual or child.

E. The licensee shall provide notification of the event to the referring physician and also notify the pregnant individual or mother, both hereafter referred to as "the mother," no later than 24 hours after discovery of an event that would require reporting in accordance with Subsection A or B of this Section, unless the referring physician personally informs the licensee either that he or she will inform the mother or that, based on medical judgment, telling the mother would be harmful. The licensee is not required to notify the mother without first consulting with the referring physician. If the referring physician or mother cannot be reached within 24 hours, the licensee shall make the appropriate notifications as soon as possible thereafter. The licensee may not delay any appropriate medical care for the embryo/fetus or for the nursing child, including any necessary remedial care as a result of the event, because of any delay in notification. To meet the requirements of this Subsection, the notification may be made to the mother's or child's responsible relative or guardian instead of to the mother. If a verbal notification is made, the licensee shall inform the mother, or the mother's or child's responsible relative or guardian, that a written description of the event can be obtained from the licensee upon request. The licensee shall provide such a written description if requested.

F. A licensee shall:

1. annotate a copy of the report provided to the Office of Environmental Compliance, SPOC with:

a. the name of the pregnant individual or the nursing child who is the subject of the event; and

b. the social security number or other identification number, if one has been assigned, of the pregnant individual or the nursing child who is the subject of the event; and

2. provide a copy of the annotated report to the referring physician, if other than the licensee, no later than 15 days after the discovery of the event.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 30:1174 (June 2004).

§712. Notifications, Reports, and Records of Medical Events

A. A licensee shall report any medical event, except for an event that results from patient intervention, in which the administration of radioactive material or radiation from radioactive material results in:

1. a dose that differs from the prescribed dose, or the dose that would have resulted from the prescribed dosage, by more than 0.05 Sv (5 rem) effective dose equivalent, (0.5 Sv (50 rem) to an organ or tissue), or 0.5 Sv (50 rem) shallow dose equivalent to the skin, where:

a. the total dose delivered differs from the prescribed dose by 20 percent or more;

b. the total dosage delivered differs from the prescribed dosage by 20 percent or more or falls outside the prescribed dosage range; or

c. the fractionated dose delivered differs from the prescribed dose, for a single fraction, by 50 percent or more;

2. a dose that exceeds 0.05 Sv (5 rem) effective dose equivalent, 0.5 Sv (50 rem) to an organ or tissue, or 0.5 Sv (50 rem) shallow dose equivalent to the skin from any of the following:

a. an administration of a wrong radioactive drug;

b. an administration of a radioactive drug by the wrong route of administration;

c. an administration of a dose or dosage to the wrong individual or human research subject;

d. an administration of a dose or dosage delivered by the wrong mode of treatment; or

e. a leaking sealed source; or

3. a dose to the skin or an organ or tissue other than the treatment site that exceeds 0.5 Sv (50 rem) to an organ or tissue and 50 percent or more of the dose expected from the administration defined in the written directive (excluding, for permanent implants, seeds that were implanted in the correct site but migrated outside the treatment site).

B. A licensee shall report any event resulting from intervention of a patient or human research subject in which the administration of radioactive material results or will result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician.

C. The following notifications are required for a medical event.

1. The licensee shall notify the Office of Environmental Compliance in the manner provided in LAC

33:I.3923 no later than the next calendar day after discovery of the medical event.

2. The licensee shall submit a written report to the Office of Environmental Compliance using the procedures in LAC 33:I.3925 within 15 days after discovery of the medical event. The written report shall include the licensee's name; the prescribing physician's name; a brief description of the event; why the event occurred; the effect on the individual who received the administration; what improvements are needed to prevent recurrence; actions taken to prevent recurrence; whether the licensee notified the individual, or the individual's responsible relative or guardian, and if not, why not; and if the individual was notified, what information was provided to the individual. The report shall not include the individual's name or other information that could lead to identification of the individual. To meet the requirements of this Section, the notification of the medical event may be made to the individual or instead to that individual's responsible relative or guardian, when appropriate.

3. The licensee shall notify the referring physician and also notify the individual who is the subject of the medical event no later than 24 hours after its discovery, unless the referring physician personally informs the licensee either that he will inform the individual or that, based on medical judgement, telling the individual would be harmful. The licensee is not required to notify the individual without first consulting the referring physician. If the referring physician or the affected individual cannot be reached within 24 hours, the licensee shall notify the individual as soon as possible thereafter. The licensee may not delay any appropriate medical care for the individual, including any necessary remedial care as a result of the medical event, because of any delay in notification. To meet the requirements of this Paragraph, the notification to the individual who is the subject of the medical event may be made instead to that individual's responsible relative or guardian. If a verbal notification is made, the licensee shall inform the individual, or appropriate responsible relative or guardian, that a written description of the event can be obtained from the licensee upon request. The licensee shall provide such a written description if requested.

4. If the individual was notified, the licensee shall also furnish, within 15 days after discovery of the medical event, a written report to the individual by sending either:

a. a copy of the report that was submitted to the department; or

b. a brief description of both the event and the consequences as they may affect the individual, provided a statement is included that the report submitted to the department can be obtained from the licensee.

D. Each licensee shall retain a record of each medical event for five years. The record shall contain the names of all individuals involved (including the prescribing physician, allied health personnel, the individual affected by the medical event, and the individual's referring physician), the individual's social security number or identification number if one has been assigned, a brief description of the medical event, why it occurred, the effect on the individual, what improvements are needed to prevent recurrence, and the actions taken to prevent recurrence.

E. Aside from the notification requirement, nothing in this Section affects any rights or duties of licensees and physicians in relation to each other, the individual, or the individual's responsible relatives or guardians.

F. A licensee shall:

1. annotate a copy of the report provided to the department with:

a. the name of the individual who is the subject of the event; and

b. the social security number or other identification number, if one has been assigned, of the individual who is the subject of the event; and

2. provide a copy of the annotated report to the referring physician, if other than the licensee, no later than 15 days after the discovery of the event.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2102 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2588 (November 2000), LR 30:1174 (June 2004).

§715. Possession, Use, Calibration, and Checking of Dose Calibrators and of Instruments to Measure Dosages of Alpha-Emitting or Beta-Emitting Radionuclides

A. For direct measurements performed in accordance with LAC 33:XV.717, a licensee shall possess and use instrumentation to measure the activity of unsealed radioactive material before it is administered to each patient or human research subject.

B. – C. …

D. A licensee shall also perform checks and tests required by Subsection B of this Section following adjustment or repair of the dose calibrator.

E. A licensee shall retain a record of each check and test required by this Section for two years. The records for the checks and tests required by Subsection B of this Section shall include:

1. for Paragraph B.1 of this Section, the model and serial number of the dose calibrator, the identity and calibrated activity of the radionuclide contained in the check source, the date of the check, the activity measured, the instrument settings, and the initials of the individual who performed the check;

2. for Paragraph B.2 of this Section, the model and serial number of the dose calibrator, the model and serial number of each source used and the identity of the

radionuclide contained in the source and its activity, the date of the test, the results of the test, the instrument settings, and the signature of the radiation safety officer;

3. for Paragraph B.3 of this Section, the model and serial number of the dose calibrator, the calculated activities, the measured activities, the date of the test, and the signature of the radiation safety officer; and

4. for Paragraph B.4 of this Section, the model and serial number of the dose calibrator, the configuration and calibrated activity of the source measured, the activity of the source, the activity measured and the instrument setting for each volume measured, the date of the test, and the signature of the radiation safety officer.

F. – F.2.b. …

G. A licensee shall calibrate the instrumentation required in Subsection A of this Section in accordance with nationally-recognized standards or the manufacturer's instructions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2103 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1175 (June 2004).

§716. Calibration and Checking of Survey Instruments

A. …

B. To satisfy the requirements of Subsection A of this Section, the licensee shall:

1. – 3. …

C. To satisfy the requirements of Subsection B of this Section, the licensee shall consider a point as calibrated if the indicated exposure rate differs from the calculated exposure rate by not more than 20 percent, and shall conspicuously attach a correction chart or graph to the instrument. A licensee may not use survey instruments if the difference between the indicated exposure rate and the calculated exposure rate is more than the allowed 20 percent.

D. …

E. The licensee shall retain a record of each calibration required in Subsection A of this Section for two years. The record shall include:

1. – 2. …

F. To meet the requirements of Subsections A, B, and C of this Section, the licensee may obtain the services of individuals licensed by the department, the U.S. Nuclear Regulatory Commission, an agreement state, or a licensing state to perform calibrations of survey instruments. Records of calibrations that contain information required by Subsection E of this Section shall be maintained by the licensee.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2589 (November 2000), LR 30:1176 (June 2004).

§717. Assay of Radiopharmaceutical Dosages

A. A licensee shall determine and record the activity of each dosage before medical use.

B. For a unit dosage, this determination shall be made by:

1. direct measurement of radioactivity; or

2. a decay correction, based on the activity or activity concentration determined by:

a. a manufacturer or preparer licensed under LAC 33:XV.328.J or equivalent agreement state requirements; or

b. a U.S. Nuclear Regulatory Commission or agreement state licensee, for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by FDA.

C. For other than unit dosages, this determination shall be made by:

1. direct measurement of radioactivity;

2. a combination of measurement of radioactivity and mathematical calculations; or

3. a combination of volumetric measurements and mathematical calculations, based on the measurement made by a manufacturer or preparer licensed under LAC 33:XV.328.J or equivalent agreement state requirements.

D. Unless otherwise directed by the authorized user, a licensee may not use a dosage if the dosage does not fall within the prescribed dosage range or if the dosage differs from the prescribed dosage by more than 20 percent.

E. A licensee shall retain a record of the dosage determination required by this Section for three years. The record shall contain:

1. the radiopharmaceutical;

2. the patient's or human research subject's name or identification number, if one has been assigned;

3. the prescribed dosage, the determined dosage, or a notation that the total activity is less than 1.1 MBq (30 μCi);

4. the date and time of the dosage determination; and

5. the name of the individual who determined the dosage.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569

(October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2103 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1176 (June 2004).

§719. Requirements for Possession of Sealed Sources and Brachytherapy Sources

A. – B.2. …

C. To satisfy the leak test requirements of Subsection B of this Section, the licensee shall assure that:

C.1. – H. …

I. A licensee shall retain a record of each survey required in Subsection H of this Section for two years. The record shall include the date of the survey, a sketch of each area that was surveyed, the measured dose rate at several points in each area expressed in milliroentgens per hour, the model number and serial number of the survey instrument used to make the survey, and the signature of the radiation safety officer.

J. Before the first medical use of a brachytherapy source on or after October 24, 2002, a licensee shall have:

1. determined the source output or activity using a dosimetry system that meets the requirements of LAC 33:XV.755.A;

2. determined source positioning accuracy within applicators; and

3. used published protocols currently accepted by nationally-recognized bodies to meet the requirements of Paragraphs J.1 and J.2 of this Section.

K. A licensee may use measurements provided by the source manufacturer or by a calibration laboratory accredited by the American Association of Physicists in Medicine that are made in accordance with Subsection J of this Section.

L. A licensee shall mathematically correct the outputs or activities determined in Subsection A of this Section for physical decay at intervals consistent with 1 percent physical decay.

M. A licensee shall retain a record of each calibration in accordance with LAC 33:XV.744.B.

N. Only an authorized medical physicist shall calculate the activity of each strontium-90 source that is used to determine the treatment times for ophthalmic treatments. The decay shall be based on the activity determined in accordance with Subsections J-M of this Section.

O. A licensee shall retain a record of the activity of each strontium-90 source in accordance with LAC 33:XV.744.C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2589 (November 2000), LR 30:1176 (June 2004).

§726. Mobile Medical Service Technical Requirements

A. A licensee providing mobile medical services shall do the following.

1. Obtain a letter signed by the management of each client for which services are rendered that permits the use of radioactive material at the client's address and clearly delineates the authority and responsibility of the licensee and the client.

2. Check instruments used to measure the activity of unsealed radioactive material for proper function before medical use at each client's address or on each day of use, whichever is more frequent. At a minimum, the check for proper function required by this Paragraph shall include a constancy check.

3. Check survey instruments for proper operation with a dedicated check source before use at each client's address.

4. Before leaving a client's address, survey all areas of use to ensure compliance with the requirements in LAC 33:XV.Chapter 4.

B. A mobile medical service may not have radioactive material delivered from the manufacturer or the distributor to the client unless the client has a license allowing possession of the radioactive material. Radioactive material delivered to the client shall be received and handled in conformance with the client's license.

C. A licensee providing mobile medical services shall retain a copy of each letter that permits the use of radioactive material at a client's address, as required by Paragraph A.1 of this Section. Each letter shall be retained for three years after the last provision of service.

D. A licensee providing mobile medical services shall retain the record of each survey required by Paragraph A.4 of this Section for three years. The record shall include the date of the survey, the results of the survey, the instrument used to make the survey, and the name of the individual who performed the survey.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1177 (June 2004).

§728. Decay-in-Storage

A. – A.2. …

3. removes or obliterates all radiation labels, except for radiation labels on materials that are within containers and that will be managed as biomedical waste after they have been released from the licensee; and

4. …

B. For radioactive material disposed in accordance with Subsection A of this Section, the licensee shall retain a record of each disposal for two years. The record must include the date of the disposal, the date on which the radioactive material was placed in storage, the radionuclides disposed, the model and serial number of the survey instrument used, the background dose rate, the radiation dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1238 (August 2001), LR 30:1177 (June 2004).

§729. Use of Radiopharmaceuticals for Uptake, Dilution, or Excretion Studies

A. – A.7. …

B. A licensee using a radiopharmaceutical specified in Subsection A of this Section for a clinical procedure other than one specified in the product label or package insert instructions shall comply with the product label or package insert instructions regarding physical form, route of administration, and dosage range.

C. The radiopharmaceuticals specified in Subsection A of this Section shall be:

1. obtained from a manufacturer or preparer licensed in accordance with LAC 33:XV.328.J or equivalent Nuclear Regulatory Commission or agreement state requirements;

2. prepared by an authorized nuclear pharmacist, a physician who is an authorized user and who meets the requirements specified in LAC 33:XV.763.C, or an individual under the supervision of either as specified in LAC 33:XV.709;

3. obtained from and prepared by a Nuclear Regulatory Commission or agreement state licensee, for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by FDA; or

4. prepared by the licensee, for use in research in accordance with a Radioactive Drug Research Committee-approved application or an IND protocol accepted by FDA.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Repealed and repromulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2104 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1177 (June 2004).

§731. Use of Radiopharmaceuticals, Generators, and Reagent Kits For Imaging and Localization Studies

A. – C. …

D. Technetium-99m pentetate as an aerosol for lung function studies is not subject to the restrictions in Subsection B of this Section.

E. – F.2. …

G. Except for quantities that require a written directive in accordance with LAC 33:XV.777.B, a licensee may use any unsealed radioactive material prepared for medical use for imaging and localization studies that is:

1. obtained from a manufacturer or preparer licensed under LAC 33:XV.328.J or equivalent agreement state requirements;

2. prepared by an authorized nuclear pharmacist, a physician who is an authorized user and who meets the requirements specified in LAC 33:XV.763.D, or an individual under the supervision of either as specified in LAC 33:XV.709;

3. obtained from and prepared by a Nuclear Regulatory Commission or agreement state licensee, for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by FDA; or

4. prepared by the licensee, for use in research in accordance with a Radioactive Drug Research Committee-approved application or an IND protocol accepted by FDA.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Repealed and repromulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2104 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2589 (November 2000), LR 27:1238 (August 2001), LR 30:1178 (June 2004).

§735. Use of Radiopharmaceuticals for Therapy

A. – B.2. …

C. A licensee may use any unsealed radioactive material prepared for medical use and for which a written directive is required that is:

1. obtained from a manufacturer or preparer licensed under LAC 33:XV.328.J or equivalent agreement state requirements;

2. prepared by an authorized nuclear pharmacist, a physician who is an authorized user and who meets the requirements specified in LAC 33:XV.763.E, or an individual under the supervision of either as specified in LAC 33:XV.709;

3. obtained from and prepared by a Nuclear Regulatory Commission or agreement state licensee, for use

in research in accordance with an IND protocol accepted by FDA; or

4. prepared by the licensee, for use in research in accordance with an IND protocol accepted by FDA.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Repealed and repromulgated by the Department of Environmental Quality, Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2104 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1178 (June 2004).

§736. Safety Instruction

A. – B.1. …

2. visitor control, including:

a. routine visitation to hospitalized individuals in accordance with LAC 33:XV.421.A.1; and

b. visitation authorized in accordance with LAC 33:XV.421.C;

3. – 6. …

C. A licensee shall keep a record of individuals receiving instruction required by Subsection A of this Section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction. Such record shall be maintained for inspection by the department for two years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2105 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2589 (November 2000), LR 30:1178 (June 2004).

§737. Safety Precautions

A. …

1. quarter the patient or human research subject either in:

a. a private room with a private sanitary facility; or

b. a room, with a private sanitary facility, with another individual who also has received therapy with unsealed radioactive material and who also cannot be released under LAC 33:XV.725;

A.2. – B. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2105 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2589 (November 2000), LR 30:1178 (June 2004).

§739. Use of Sealed Sources for Diagnosis

A. A licensee shall use only sealed sources for diagnostic medical uses as approved in the Sealed Source and Device Registry.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1178 (June 2004).

§741. Use of Sources for Brachytherapy

A. – A.5. …

B. A licensee shall use only radioactive sources for therapeutic medical uses:

1. as approved in the Sealed Source and Device Registry; or

2. in research in accordance with an active Investigational Device Exemption (IDE) application accepted by the FDA, provided the requirements of LAC 33:XV.713.A.1 are met.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1178 (June 2004).

§742. Safety Instructions

A. …

B. To satisfy the requirements of Subsection A of this Section, the instruction shall describe:

1. – 3. …

4. procedures for visitor control, including:

a. routine visitation of hospitalized individuals in accordance with LAC 33:XV.421.A.1; and

b. visitation authorized in accordance with LAC 33:XV.421.C;

5. – 6. …

C. A licensee shall maintain a record of individuals receiving instruction required by Subsection A of this Section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction for two years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2105 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1179 (June 2004).

§743. Safety Precautions

A. – A.4. …

B. A licensee shall have applicable emergency response equipment available near each treatment room to respond to a source:

1. dislodged from the patient; or

2. lodged within the patient following removal of the source applicators.

C. A licensee shall notify the radiation safety officer or authorized user immediately if the patient or human research subject dies or has a medical emergency.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2105 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1179 (June 2004).

§744. Brachytherapy Records

A. Brachytherapy Sources Inventory

1. A licensee shall maintain accountability at all times for all brachytherapy sources in storage or use.

2. Promptly after removing them from a patient or a human research subject, the licensee shall return brachytherapy sources to an area of storage from the area of use, and immediately count or otherwise verify the number returned to ensure that all sources taken from the storage area have been returned.

3. A licensee shall make a record of brachytherapy source utilization that includes:

a. the names of the individuals permitted to handle the sources;

b. the number and activity of sources removed from storage, the room number of use and the patient’s or human research subject's name, the time and date the sources were removed from storage, the number and activity of sources in storage after the removal, and the initials of the individual who removed the sources from storage; and

c. the number and activity of sources returned to storage, the room number of use and the patient’s or human research subject's name, the time and date the sources were returned to storage, the number and activity of sources in storage after the return, and the initials of the individual who returned the sources to storage.

4. Immediately after implanting sources in a patient or human research subject and immediately after removal of sources from a patient or human research subject, the licensee shall make a radiation survey of the patient or human research subject and the area of use to confirm that no sources have been misplaced. The licensee shall make a record of each survey.

5. A licensee shall maintain the records required in Paragraphs A.3 and 4 of this Section for two years.

B. Records of Calibration Measurements of Brachytherapy Sources

1. A licensee shall maintain a record of the calibrations of brachytherapy sources required by LAC 33:XV.719 for three years after the last use of the source.

2. The record shall include:

a. the date of the calibration;

b. the manufacturer's name, model number, and serial number for the source and the instruments used to calibrate the source;

c. the source output or activity;

d. the source positioning accuracy within the applicators; and

e. the signature of the authorized medical physicist.

C. Records of Decay of Strontium-90 Sources for Ophthalmic Treatments

1. A licensee shall maintain a record of the activity of a strontium-90 source required by LAC 33:XV.719 for the life of the source.

2. The record shall include:

a. the date and initial activity of the source as determined in accordance with LAC 33:XV.719; and

b. for each decay calculation, the date and the source activity as determined in accordance with LAC 33:XV.719.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2106 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1179 (June 2004).

§745. Surveys for Temporary Implants

A. Immediately after implanting sources in a patient or a human research subject, the licensee shall make a survey to locate and account for all sources that have not been implanted.

B. Immediately after removing the last temporary implant source from a patient or human research subject, the licensee shall perform a radiation survey of the patient or human research subject with a radiation detection survey

instrument to confirm that all sources have been removed. The licensee shall not release from confinement for medical care a patient or human research subject treated by temporary implant until all sources have been removed.

C. Before releasing a patient or a human research subject treated with a remote afterloader unit from licensee control, a licensee shall survey the patient or the human research subject and the remote afterloader unit with a portable radiation detection survey instrument to confirm that the sources have been removed from the patient or human research subject and returned to the safe shielded position.

D. A licensee shall maintain a record of patient or human research subject surveys that demonstrates compliance with Subsections A, B, and C of this Section for two years. Each record shall include the date and results of the survey, the survey instrument used, and the name of the individual who made the survey.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2106 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1180 (June 2004).

§747. Use of Sealed Sources in Teletherapy Units, Remote Afterloader Units, and Gamma Stereotactic Radiosurgery Units

A. A licensee shall use sealed sources in teletherapy units, photon emitting remote afterloader units, or gamma stereotactic radiosurgery units for therapeutic medical uses:

1. as approved in the Sealed Source and Device Registry; or

2. in research in accordance with an active Investigational Device Exemption (IDE) application accepted by the FDA, provided the requirements of LAC 33:XV.713.A.1 are met.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1180 (June 2004).

§748. Maintenance and Repair Restrictions

A. …

B. Except for low dose-rate remote afterloader units, only a person specifically licensed by the department, the U.S. Nuclear Regulatory Commission, or an agreement state shall install, replace, relocate, or remove a sealed source or a source contained in a remote afterloader unit, a teletherapy unit, or a gamma stereotactic radiosurgery unit.

C. For a low dose-rate remote afterloader unit, only a person specifically licensed by the department, the U.S. Nuclear Regulatory Commission, or an agreement state or an authorized medical physicist shall install, replace, relocate, or remove a sealed source contained in the unit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2590 (November 2000), LR 30:1180 (June 2004).

§750. Safety Procedures and Instructions for Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units

A. For remote afterloader units, teletherapy units, and gamma stereotactic radiosurgery units, a licensee shall:

1. secure the unit, the console, the console keys, and the treatment room when not in use or unattended;

2. permit only individuals approved by the authorized user, radiation safety officer, or authorized medical physicist to be present in the treatment room during treatment with the source;

3. prevent dual operation of more than one radiation-producing device in a treatment room, if applicable; and

4. develop, implement, and maintain written procedures for responding to an abnormal situation when the operator is unable to place the source in the shielded position or remove the patient or human research subject from the radiation field with controls from outside the treatment room. These procedures shall include:

a. instructions for responding to equipment failures and the names of the individuals responsible for implementing corrective actions;

b. the process for restricting access to and posting of the treatment area to minimize the risk of inadvertent exposure; and

c. the names and telephone numbers of the authorized users, the authorized medical physicist, and the radiation safety officer to be contacted if the unit or console operates abnormally.

B. A copy of the procedures required by Paragraph A.4 of this Section shall be physically located at the unit console.

C. A licensee shall conspicuously post written instructions at the unit console. These instructions shall inform the operator of:

1. the location of the procedures required by Paragraph A.4 of this Section; and

2. the names and telephone numbers of the authorized users, the authorized medical physicist, and radiation safety officer to be immediately contacted if the unit or console operates abnormally.

D. A licensee shall provide instruction, initially and at least annually, to all individuals who operate the unit, as appropriate to the individual's assigned duties, in:

1. the procedures identified in Paragraph A.4 of this Section; and

2. the operating procedures for the unit.

E. A licensee shall ensure that operators, authorized medical physicists, and authorized users participate in drills of the emergency procedures, initially and at least annually.

F. A licensee shall maintain a record of individuals receiving instruction required by Subsection D of this Section, a description of the instruction, the date of instruction, and the name of the individual who gave the instruction for two years.

G. A licensee shall retain a copy of the procedures required by Paragraph A.4 and D.2 of this Section until the licensee no longer possesses the remote afterloader, teletherapy unit, or gamma stereotactic radiosurgery unit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2106 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1180 (June 2004).

§751. Safety Precautions for Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units

A. A licensee shall control access to the treatment room by a door at each entrance.

B. A licensee shall equip each entrance to the treatment room with an electrical interlock system that will:

1. prevent the operator from initiating the treatment cycle unless each treatment room entrance door is closed;

2. cause the source to be shielded when an entrance door is opened; and

3. prevent the source from being exposed following an interlock interruption until all treatment room entrance doors are closed and the source "on-off" control is reset at the console.

C. A licensee shall require any individual entering the treatment room to ensure, through the use of appropriate radiation monitors, that radiation levels have returned to ambient levels.

D. Except for low-dose remote afterloader units, a licensee shall construct or equip each treatment room with viewing and intercom systems to permit continuous observation of the patient or the human research subject from the treatment console during irradiation.

E. For licensed activities where sources are placed within the patient's or human research subject's body, a licensee shall only conduct treatments that allow for expeditious removal of a decoupled or jammed source.

F. In addition to the requirements specified in Subsections A through E of this Section, a licensee shall:

1. for medium dose-rate and pulsed dose-rate remote afterloader units, require:

a. an authorized medical physicist and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, to be physically present during the initiation of all patient treatments involving the unit; and

b. an authorized medical physicist and either an authorized user or an individual, under the supervision of an authorized user, who has been trained to remove the source applicator in the event of an emergency involving the unit, to be immediately available during continuation of all patient treatments involving the unit;

2. for high dose-rate remote afterloader units, require:

a. an authorized medical physicist and an authorized user to be physically present during the initiation of all patient treatments involving the unit; and

b. an authorized medical physicist and either an authorized user or a physician, under the supervision of an authorized user, who has been trained in the operation and emergency response for the unit, to be physically present during continuation of all patient treatments involving the unit;

3. for gamma stereotactic radiosurgery units, require an authorized medical physicist and an authorized user to be physically present throughout all patient treatments involving the unit;

4. notify the radiation safety officer, or his/her designee, and an authorized user as soon as possible if the patient or human research subject has a medical emergency or dies.

G. A licensee shall have applicable emergency response equipment available near each treatment room to respond to a source:

1. remaining in the unshielded position; or

2. lodged within the patient following completion of the treatment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1181 (June 2004).

§755. Dosimetry Equipment and Therapy-Related Computer Systems

A. – A.2. …

B. The licensee shall have available for use a dosimetry system for spot-check measurements. To meet this requirement, the system may be compared with a system that has been calibrated in accordance with Subsection A of this Section. This comparison shall have been performed within the previous year and after each servicing that may have affected system calibration. The spot-check system may be the same system used to meet the requirement in Subsection A of this Section.

C. The licensee shall maintain a record of each calibration, intercomparison, and comparison for the duration of the license. For each calibration, intercomparison, or comparison, the record shall include:

1. the date;

2. the model numbers and serial numbers of the instruments that were calibrated, intercompared, or compared, as required by Subsections A and B of this Section;

3. the correction factors that were determined;

4. the names of the individuals who performed the calibration, intercomparison, or comparison; and

5. evidence that the intercomparison meeting was sanctioned by a calibration laboratory or radiologic physics center accredited by the American Association of Physicists in Medicine.

D. The licensee shall perform acceptance testing on the treatment planning system of a therapy-related computer system in accordance with published protocols accepted by nationally-recognized bodies. At a minimum, the acceptance testing shall include, as applicable, verification of:

1. the source-specific input parameters required by the dose calculation algorithm;

2. the accuracy of dose, dwell time, and treatment time calculations at representative points;

3. the accuracy of isodose plots and graphic displays;

4. the accuracy of the software used to determine sealed source positions from radiographic images; and

5. the accuracy of electronic transfer of the treatment delivery parameters to the treatment delivery unit from the treatment planning system.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1181 (June 2004).

§756. Full Calibration Measurements on Teletherapy Units, Remote Afterloader Units, and Gamma Stereotactic Radiosurgery Units

A. Full Calibration Measurements on Teletherapy Units

1. A licensee authorized to use a teletherapy unit for medical use shall perform full calibration measurements on each teletherapy unit:

a. before the first medical use of the unit;

b. before medical use under the following conditions:

i. whenever spot-check measurements indicate that the output differs by more than 5 percent from the output obtained at the last full calibration corrected mathematically for radioactive decay;

ii. following replacement of the source or following reinstallation of the teletherapy unit in a new location; and

iii. following any repair of the teletherapy unit that includes removal of the source or major repair of the components associated with the source exposure assembly; and

c. at intervals not exceeding one year.

2. To satisfy the requirement of Paragraph A.1 of this Section, full calibration measurements shall include determination of:

a. the output within 3 percent for the range of field sizes and for the distance or range of distances used for medical use;

b. the coincidence of the radiation field and the field indicated by the light beam localizing device;

c. the uniformity of the radiation field and its dependence on the orientation of the useful beam;

d. timer accuracy, constancy, and linearity;

e. "on-off" error; and

f. the accuracy of all distance measuring and localization devices in medical use.

3. A licensee shall use the dosimetry system described in LAC 33:XV.755 to measure the output for one set of exposure conditions. The remaining radiation measurements required in Subparagraph A.2.a of this Section may then be made using a dosimetry system that indicates relative dose rates.

4. A licensee shall make full calibration measurements required by Paragraph A.1 of this Section in accordance with the procedures recommended by Task Group 21 of the Radiation Therapy Committee of the American Association of Physicists in Medicine that are described in *Medical Physics*, vol. 10, number 6, 1983, pp. 741-771, and vol. 11, number 2, 1984, p. 213.

5. A licensee shall correct mathematically the outputs determined in Subparagraph A.2.a of this Section for physical decay for intervals not exceeding one month for cobalt-60 and intervals not exceeding six months for cesium-137.

6. Full calibration measurements required by Paragraph A.1 of this Section and physical decay corrections required by Paragraph A.5 of this Section shall be performed by a teletherapy physicist named on the licensee's license or authorized by a license issued by the U.S. Nuclear Regulatory Commission or an agreement state to perform such services.

7. A licensee shall retain a record of each calibration in accordance with Subsection D of this Section.

B. Full Calibration Measurements on Remote Afterloader Units

1. A licensee authorized to use a remote afterloader unit for medical use shall perform full calibration measurements on each unit:

a. before the first medical use of the unit;

b. before medical use under the following conditions:

i. following replacement of the source or following reinstallation of the unit in a new location outside the facility; and

ii. following any repair of the unit that includes removal of the source or major repair of the components associated with the source exposure assembly;

c. at intervals not exceeding one quarter for high dose-rate, medium dose-rate, and pulsed dose-rate remote afterloader units with sources whose half-life exceeds 75 days; and

d. at intervals not exceeding one year for low dose-rate remote afterloader units.

2. To satisfy the requirement of Paragraph B.1 of this Section, full calibration measurements shall include, as applicable, determination of:

a. the output within 5 percent;

b. source positioning accuracy to within 1 millimeter;

c. source retraction with backup battery upon power failure;

d. length of the source transfer tubes;

e. timer accuracy and linearity over the typical range of use;

f. length of the applicators; and

g. function of the source transfer tubes, applicators, and transfer tube-applicator interfaces.

3. A licensee shall use the dosimetry system described in LAC 33:XV.755.A to measure the output.

4. A licensee shall make the full calibration measurements required by Subsection A of this Section in accordance with published protocols accepted by nationally-recognized bodies.

5. In addition to the requirements for full calibrations for low dose-rate remote afterloader units in Paragraph B.2 of this Section, a licensee shall perform an autoradiograph of the sources to verify inventory and source arrangement at intervals not exceeding one quarter.

6. For low dose-rate remote afterloader units, a licensee may use measurements provided by the source manufacturer that are made in accordance with Paragraphs B.1-5 of this Section.

7. A licensee shall mathematically correct the output determined in Subparagraph B.2.a of this Section for physical decay at intervals consistent with 1 percent physical decay.

8. Full calibration measurements required by Paragraph B.1 of this Section and physical decay corrections required by Paragraph B.7 of this Section shall be performed by the authorized medical physicist.

9. A licensee shall retain a record of each calibration in accordance with Subsection D of this Section.

C. Full Calibration Measurements on Gamma Stereotactic Radiosurgery Units

1. A licensee authorized to use a gamma stereotactic radiosurgery unit for medical use shall perform full calibration measurements on each unit:

a. before the first medical use of the unit;

b. before medical use under the following conditions:

i. whenever spot-check measurements indicate that the output differs by more than 5 percent from the output obtained at the last full calibration corrected mathematically for radioactive decay;

ii. following replacement of the sources or following reinstallation of the gamma stereotactic radiosurgery unit in a new location; and

iii. following any repair of the gamma stereotactic radiosurgery unit that includes removal of the sources or major repair of the components associated with the source assembly; and

c. at intervals not exceeding one year, with the exception that relative helmet factors need only be determined before the first medical use of a helmet and following any damage to a helmet.

2. To satisfy the requirement of Paragraph C.1 of this Section, full calibration measurements shall include determination of:

a. the output within 3 percent;

b. relative helmet factors;

c. isocenter coincidence;

d. timer accuracy and linearity over the range of use;

e. “on-off” error;

f. trunnion centricity;

g. proper functioning of treatment table retraction mechanism, using backup battery power or hydraulic backups with the unit off;

h. proper functioning of helmet microswitches;

i. proper functioning of emergency timing circuits; and

j. proper functioning of stereotactic frames and localizing devices (trunnions).

3. A licensee shall use the dosimetry system described in LAC 33:XV.755.A to measure the output for one set of exposure conditions. The remaining radiation measurements required in Subparagraph C.2.a of this Section may be made using a dosimetry system that indicates relative dose rates.

4. A licensee shall make the full calibration measurements required by Paragraph C.1 of this Section in accordance with published protocols accepted by nationally-recognized bodies.

5. A licensee shall mathematically correct the outputs determined in Subparagraph C.2.a of this Section at intervals not exceeding one month for cobalt-60 and at intervals consistent with 1 percent physical decay for all other radionuclides.

6. Full calibration measurements required by Paragraph C.1 of this Section and physical decay corrections required by Paragraph C.5 of this Section shall be performed by the authorized medical physicist.

7. A licensee shall retain a record of each calibration in accordance with Subsection D of this Section.

D. Records of Teletherapy Unit, Remote Afterloader Unit, and Gamma Stereotactic Radiosurgery Unit Full Calibrations

1. A licensee shall maintain a record of the teletherapy unit, remote afterloader unit, and gamma stereotactic radiosurgery unit full calibrations required by Subsections A, B, and C of this Section for three years. The record shall include:

a. the date of the calibration;

b. the manufacturer's name, model number, and serial number of the teletherapy, remote afterloader, or gamma stereotactic radiosurgery unit, the source, and the instruments used to calibrate the unit;

c. the results and an assessment of the full calibrations;

d. the results of the autoradiograph required for low dose-rate remote afterloader units; and

e. the signature of the authorized medical physicist who performed the full calibration.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 30:1182 (June 2004).

§757. Periodic Spot-Checks

A. Periodic Spot-Checks for Teletherapy Units

1. A licensee authorized to use teletherapy units for medical use shall perform output spot-checks on each teletherapy unit at intervals not to exceed one month.

2. To satisfy the requirement of Paragraph A.1 of this Section, spot-checks shall include determination of:

a. timer constancy and timer linearity over the range of use;

b. "on-off" error;

c. the coincidence of the radiation field and the field indicated by the light-beam localizing device;

d. the accuracy of all distance-measuring and localization devices used for medical use;

e. the output for one typical set of operating conditions; and

f. the difference between the measurement made in Subparagraph A.2.e of this Section and the anticipated output, expressed as a percentage of the anticipated output (i.e., the value obtained at last full calibration corrected mathematically for physical decay).

3. A licensee shall use the dosimetry system described in LAC 33:XV.755 to make the spot-check required in Subparagraph A.2.e of this Section.

4. A licensee shall perform spot-checks required by Paragraph A.1 of this Section in accordance with procedures established by the teletherapy physicist. The teletherapy physicist does not need to actually perform the output spot-check measurements.

5. A licensee shall have the teletherapy physicist review the results of each output spot-check within 15 days. The teletherapy physicist shall promptly notify the licensee in writing of the results of each output spot-check. The licensee shall keep a copy of each written notification for two years.

6. A licensee authorized to use a teletherapy unit for medical use shall perform safety spot-checks of each teletherapy facility at intervals not to exceed one month.

7. To satisfy the requirement of Paragraph A.6 of this Section, safety spot-checks shall ensure proper operation of:

a. electrical interlocks at each teletherapy room entrance;

b. electrical or mechanical stops installed for the purpose of limiting use of the primary beam of radiation, restricting source housing angulation or elevation and carriage or stand travel, and operating the beam "on-off" mechanism;

c. beam condition indicator lights on the teletherapy unit, on the control console, and in the facility;

d. viewing systems;

e. treatment room doors from inside and outside the treatment room; and

f. electrically-assisted treatment room doors with the teletherapy unit electrical power turned "off."

8. A licensee shall lock the control console in the "off" position if any door interlock malfunctions. No licensee shall use the unit until the interlock system is repaired unless specifically authorized to do so in writing by the department.

9. A licensee shall promptly repair any system identified in Paragraph A.7 of this Section that is not operating properly. The teletherapy unit shall not be used until all repairs are completed.

10. A licensee shall maintain a record of each spot-check required by Paragraphs A.1 and 6 of this Section for two years. The record shall include the date of the spot-check; the manufacturer's name, model number, and serial number for both the teletherapy unit and source; the manufacturer's name, model number, and serial number of the instrument used to measure the output of the teletherapy unit; the timer constancy and linearity; the calculated "on-off" error; a determination of the coincidence of the radiation field and the field indicated by the light beam localizing device; the timer constancy and linearity for a typical treatment time; the calculated "on-off" error; the estimated accuracy of each distance-measuring or localization device; the difference between the anticipated output and the measured output; notations indicating the operability of each entrance door electrical interlock, each electrical or mechanical stop, each beam condition indicator light, the viewing system, and doors; and the signature of the individual who performed the periodic spot-check.

B. Periodic Spot-Checks for Remote Afterloader Units

1. A licensee authorized to use a remote afterloader unit for medical use shall perform spot-checks of each remote afterloader facility and on each unit:

a. before the first use of a high dose-rate, medium dose-rate, or pulsed dose-rate remote afterloader unit on a given day;

b. before each patient treatment with a low dose-rate remote afterloader unit; and

c. after each source installation.

2. A licensee shall perform the measurements required by Paragraph B.1 of this Section in accordance with written procedures established by the authorized medical physicist. The authorized medical physicist need not actually perform the spot-check measurements.

3. A licensee shall have the authorized medical physicist review the results of each spot-check within 15 days. The authorized medical physicist shall notify the licensee as soon as possible in writing of the results of each spot-check.

4. To satisfy the requirements of Paragraph B.1 of this Section, spot-checks shall, at a minimum, ensure proper operation of:

a. electrical interlocks at each remote afterloader unit room entrance;

b. source exposure indicator lights on the remote afterloader unit, on the control console, and in the facility;

c. viewing and intercom systems in each high dose-rate, medium dose-rate, and pulsed dose-rate remote afterloader facility;

d. emergency response equipment;

e. radiation monitors used to indicate the source position;

f. timer accuracy;

g clock (date and time) in the unit's computer; and

h. decayed source activity in the unit's computer.

5. If the results of the checks required in Paragraph B.4 of this Section indicate the malfunction of any system, a licensee shall lock the control console in the “off” position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

6. A licensee shall retain a record of each check required by Paragraph B.4 of this Section and a copy of the procedures required by Paragraph B.2 of this Section for three years. The records shall include:

a. the date of the spot-check;

b. the manufacturer's name, model number, and serial number for the remote afterloader unit and source;

c. an assessment of timer accuracy;

d. notations indicating the operability of entrance door electrical interlocks, radiation monitors, source exposure indicator lights, viewing and intercom systems, and clock and decayed source activity in the unit's computer; and

e. the name of the individual who performed the periodic spot-check and the signature of the authorized medical physicist who reviewed the record of the spot-check.

7. A licensee shall retain a copy of the procedures required by Paragraph B.6 of this Section until the licensee no longer possesses the remote afterloader unit.

C. Periodic Spot-Checks for Gamma Stereotactic Radiosurgery Units

1. A licensee authorized to use a gamma stereotactic radiosurgery unit for medical use shall perform spot-checks of each gamma stereotactic radiosurgery facility and on each unit:

a. monthly;

b. before the first use of the unit on a given day; and

c. after each source installation.

2. A licensee shall:

a. perform the measurements required by Paragraph C.1 of this Section in accordance with written procedures established by the authorized medical physicist; and

b. have the authorized medical physicist review the results of each spot-check within 15 days. The authorized medical physicist shall notify the licensee as soon as possible in writing of the results of each spot-check.

3. To satisfy the requirements of Subparagraph C.1.a of this Section, spot-checks shall, at a minimum:

a. ensure proper operation of:

i. treatment table retraction mechanisms, using backup battery power or hydraulic backups with the unit off;

ii. helmet microswitches;

iii. emergency timing circuits; and

iv. stereotactic frames and localizing devices (trunnions);

b. determine:

i. the output for one typical set of operating conditions measured with the dosimetry system described in LAC 33:XV.755.B;

ii. the difference between the measurement made in accordance with Clause C.3.b.i of this Section and the anticipated output, expressed as a percentage of the anticipated output (i.e., the value obtained at last full calibration corrected mathematically for physical decay);

iii. the degree of agreement between source output and computer calculation;

iv. timer accuracy and linearity over the range of use;

v. “on-off" error; and

vi. trunnion centricity.

4. To satisfy the requirements of Subparagraphs C.1.b and c of this Section, spot-checks shall ensure proper operation of:

a. electrical interlocks at each gamma stereotactic radiosurgery room entrance;

b. source exposure indicator lights on the gamma stereotactic radiosurgery unit, on the control console, and in the facility;

c. viewing and intercom systems;

d. timer termination;

e. radiation monitors used to indicate room exposures; and

f. emergency “off” buttons.

5. A licensee shall arrange for the repair of any system identified in Paragraph C.3 of this Section that is not operating properly as soon as possible.

6. If the results of the checks required in Paragraph C.4 of this Section indicate the malfunction of any system, a licensee shall lock the control console in the “off” position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

7. A licensee shall retain a record of each check required by Paragraphs C.3 and 4 of this Section for three years. The record shall include:

a. the date of the spot-check;

b. the manufacturer's name, model number, and serial number for the gamma stereotactic radiosurgery unit and the instrument used to measure the output of the unit;

c. an assessment of timer linearity and accuracy;

d. the calculated “on-off” error;

e. a determination of trunnion centricity;

f. the difference between the anticipated output and the measured output;

g. an assessment of source output against computer calculations;

h. notations indicating the operability of radiation monitors, helmet microswitches, emergency timing circuits, emergency “off” buttons, electrical interlocks, source exposure indicator lights, viewing and intercom systems, timer termination, treatment table retraction mechanism, and stereotactic frames and localizing devices (trunnions); and

i. the name of the individual who performed the periodic spot-check and the signature of the authorized medical physicist who reviewed the record of the spot-check.

8. A licensee shall retain a copy of the procedures required by Paragraph C.2 of this Section until the licensee no longer possesses the gamma stereotactic radiosurgery unit.

D. Additional Technical Requirements for Mobile Remote Afterloader Units

1. A licensee providing mobile remote afterloader service shall:

a. check survey instruments before medical use at each address of use or on each day of use, whichever is more frequent; and

b. account for all sources before departure from a client's address of use.

2. In addition to the periodic spot-checks required by Subsection B of this Section, a licensee authorized to use mobile remote afterloaders for medical use shall perform checks on each remote afterloader unit before use at each address of use. At a minimum, checks shall be made to verify the operation of:

a. electrical interlocks on treatment area access points;

b. source exposure indicator lights on the remote afterloader unit, on the control console, and in the facility;

c. viewing and intercom systems;

d. applicators, source transfer tubes, and transfer tube-applicator interfaces;

e. radiation monitors used to indicate room exposures;

f. source positioning (accuracy); and

g. radiation monitors used to indicate whether the source has returned to a safe shielded position.

3. In addition to the requirements of periodic spot-checks in Paragraph D.2 of this Section, a licensee shall ensure overall proper operation of the remote afterloader unit by conducting a simulated cycle of treatment before use at each address of use.

4. If the results of the checks required in Paragraph D.2 of this Section indicate the malfunction of any system, a licensee shall lock the control console in the “off” position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

5. A licensee shall retain a record of each check required by Paragraph D.2 of this Section for three years. The record shall include:

a. the date of the check;

b. the manufacturer's name, model number, and serial number of the remote afterloader unit;

c. notations accounting for all sources before the licensee departs from a facility;

d. notations indicating the operability of entrance door electrical interlocks, radiation monitors, source exposure indicator lights, viewing and intercom system, applicators, source transfer tubes, and transfer tube applicator interfaces, and source positioning accuracy; and

e. the signature of the individual who performed the check.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2590 (November 2000), LR 30:1183 (June 2004).

§758. Radiation Surveys

A. A person licensed under this Chapter shall make surveys to ensure that the maximum radiation levels and average radiation levels from the surface of the main source safe with the source in the shielded position do not exceed the levels stated in the Sealed Source and Device Registry.

B. The licensee shall make the survey required by Subsection A of this Section at installation of a new source and following repairs to the source shielding, the source driving unit, or other electronic or mechanical component that could expose the source, reduce the shielding around the source, or compromise the radiation safety of the unit or the source.

C. A licensee shall maintain a record of radiation surveys of treatment units made in accordance with Subsections A and B of this Section for the duration of use of the unit. The record shall include:

1. the date of the measurements;

2. the manufacturer's name, model number, and serial number of the treatment unit, the source, and the instrument used to measure radiation levels;

3. each dose rate measured around the source while the unit is in the “off” position and the average of all measurements; and

4. the signature of the individual who performed the test.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2590 (November 2000), LR 30:1186 (June 2004).

§759. Safety Spot-Checks for Teletherapy Facilities

A. A licensee shall promptly check all systems listed in LAC 33:XV.757.A.7 for proper function after each installation of a teletherapy source and after making any change for which an amendment is required by LAC 33:XV.749.

B. If the results of the safety spot-checks required in Subsection A of this Section indicate the malfunction of any system specified in LAC 33:XV.757, the licensee shall lock the control console in the "off" position and not use the unit except as may be necessary to repair, replace, or check the malfunctioning system.

C. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental

Assessment, Environmental Planning Division, LR 30:1186 (June 2004).

§762. Five-Year Inspection

A. A licensee shall have each teletherapy unit and gamma stereotactic radiosurgery unit fully inspected and serviced during source replacement or at intervals not to exceed five years, whichever comes first, to ensure proper functioning of the source exposure mechanism.

B. – C. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2590 (November 2000), LR 30:1186 (June 2004).

§763. Training

A. – D.2.b.iii. …

iv. using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

D.2.b.v. – I.2.b.ii. …

iii. using administrative controls to prevent a medical event involving the use of radioactive material;

I.2.b.iv. – O. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 24:2106 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2590 (November 2000), LR 30:1186 (June 2004).

§777. Written Directives

A. A written directive shall be dated and signed by an authorized user before the administration of I-131 sodium iodide greater than 1.11 megabecquerels (MBq) (30 microcuries (μCi)), any therapeutic dosage of radioactive material, or any therapeutic dose of radiation from radioactive material. If, because of the emergent nature of the patient's condition, a delay in order to provide a written directive would jeopardize the patient's health, an oral directive is acceptable. The information contained in the oral directive shall be documented as soon as possible in writing in the patient's record. A written directive shall be prepared within 48 hours of the oral directive.

B. The written directive shall contain the patient's or human research subject's name and the following information:

1. for any administration of quantities greater than 1.11 MBq (30 μCi) of sodium iodide I-131, the dosage;

2. for an administration of a therapeutic dosage of unsealed radioactive material other than sodium iodide I-131:

a. the radioactive drug;

b. the dosage; and

c. the route of administration;

3. for gamma stereotactic radiosurgery:

a. the total dose;

b. the treatment site; and

c. the values for the target coordinate settings per treatment for each anatomically distinct treatment site;

4. for teletherapy:

a. the total dose;

b. the dose per fraction;

c. the number of fractions; and

d. the treatment site;

5. for high dose-rate remote afterloading brachytherapy:

a. the radionuclide;

b. the treatment site;

c. the dose per fraction;

d. the number of fractions; and

e. the total dose; or

6. for all other brachytherapy, including low, medium, and pulsed dose-rate remote afterloaders:

a. before implantation:

i. the treatment site;

ii. the radionuclide; and

iii. the dose; and

b. after implantation but before completion of the procedure:

i. the radionuclide;

ii. the treatment site;

iii. the number of sources; and

iv. the total source strength and exposure time (or the total dose).

C. For any administration requiring a written directive, the licensee shall develop, implement, and maintain written procedures to provide high confidence that:

1. the patient's or human research subject's identity is verified before each administration; and

2. each administration is in accordance with the written directive.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended LR 21:554 (June 1995), amended LR 24:2110 (November 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2591 (November 2000), LR 30:1187 (June 2004).

Chapter 14. Regulation and Licensing of Naturally Occurring Radioactive Material (NORM)

§1410. General Licenses: Pipe Yards, Storage Yards, or Production Equipment Yards

A. A general license is hereby issued for pipe yards or storage yards or production equipment yards to receive, possess, process, and clean tubular goods or equipment that are contaminated with scale or residue but do not exceed 50 microroentgens per hour, provided:

1. the department is notified at least 90 days prior to receipt of tubular goods or equipment that are contaminated with scale or residue but do not exceed 50 microroentgens per hour;

2. – 6. …

7. a plan for cleanup is submitted to the Office of Environmental Services, Permits Division within 180 days of the discovery of NORM contaminated soil in excess of the limit in LAC 33:XV.1410.A.6. The plan shall include a schedule for cleanup that is to be approved by the department. The general licensee may include in this plan an application to the department for a one time authorization to perform this cleanup or use a specific licensee; and

A.8. – B. …

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Air Quality and Nuclear Energy, Nuclear Energy Division, LR 15:736 (September 1989), repealed and repromulgated by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:605 (June 1992), amended LR 21:26 (January 1995), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2599 (November 2000), LR 30:1189 (June 2004).

Chapter 15. Transportation of Radioactive Material

§1517. Incorporation by Reference

A. The department incorporates by reference 10 CFR Part 71, Appendix A, January 1, 2003.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2104 and 2113.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:1270 (June 2000), amended LR 27:2233 (December 2001), LR 28:997 (May 2002), LR 29:701 (May 2003), LR 30:752 (April 2004).